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A STUDY OF THE AIR FORCE LOGISTICS  
PROFESSIONAL DEVELOPMENT MODEL

THESIS

David E. Gressman  
GS-12

AFIT/GLM/LSM/91S-25

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AIR UNIVERSITY  
**AIR FORCE INSTITUTE OF TECHNOLOGY**

Wright-Patterson Air Force Base, Ohio

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A STUDY OF THE AIR FORCE LOGISTICS PROFESSIONAL  
DEVELOPMENT MODEL

THESIS PROPOSAL

Presented to the Faculty of the School of Systems and Logistics  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Logistics Management

David E. Gressman

GS-12

March 1992

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## Preface

The purpose of this study was to determine whether there should be a logistics professional development model and/or certification process for all logisticians. This line of inquiry advanced to reviewing the purpose and intent of current logistic career enhancement programs and the process used to monitor them. The focus of the research lead to the combining of two relatively new programs and a certification process that would satisfy the training requirements of logisticians which would be more in line with the "cradle to grave" system philosophy of the new Air Force Material Command.

I want to thank those who took time from their busy schedules to participate in this study. Their expertise and assistance was a great help. I would also like to thank my thesis advisor, Richard A. Andrews for his help and guidance throughout this research project and second, for his quick response and encouragement. A special thanks to members of the ALD staff, Bob Bragg, Bob Lawson, Lt Col Berninger, members of the AFIT staff, Lt Col Schneider, Pat Bresnahan and my fellow workers and supervisors.

I dedicate this thesis to my family. I wish to thank my wife Becky for her patience, encouragement, love, faith and understanding which allowed me to complete my thesis.

David E. Gressman

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Abstract

The personnel population in the field of logistics has two major divisions. The first, is to organizations providing logistic support for the Air Force mission and is the Operations and Maintenance area. The second area is Acquisition, which supports the Air Force mission to acquire new weapon systems. Until recently, there was no clear plan for logisticians assigned in these two major divisions to enhance their educational development.

This research project reviewed several logistic career enhancement programs focusing on two new programs, the Acquisition Professional Development Program (APDP) and the Logistics Professional Development Program (LOGPDP). The APDP program has received the most notoriety of the two because it is mandated by public law, has congressional interest and uses a certification process to ensure personnel assigned to acquisition have a clear and well defined career path. LOGPDP, the second program, applies to the majority of personnel assigned to logistics, it does not have the support, funding or use a certification process like the APDP program. In response to a survey, expert senior level logistics managers from the two major divisions concluded that all logisticians would benefit if there was only one career track, the two programs were integrated into one, and the certification process preserved.

# A STUDY OF THE AIR FORCE LOGISTICS PROFESSIONAL DEVELOPMENT MODEL

## I. Introduction

### General Issue

The new Air Force Regulation (AFR) 36-27, Officer Personnel Acquisition Professional Development, establishes an Air Force Acquisition Professional Development Program (APDP) based on phased career progression and a certification process for government personnel assigned to acquisition positions. AFR 40-110, Vol IV, Logistics Civilian Career Enhancement Program (LCCEP), Section M, Acquisition Logistics Professional Development, (ALPD) establishes an acquisition civilian career enhancement program as a subset of the total Air Force APDP program.

These new regulations established a phased professional career development program and certification process for officers and civilians which is only available to a select minority of logisticians employed in the logistics field. Most Air Force logistics personnel are assigned to non-acquisition positions and therefore do not qualify for the new APDP program. For those logisticians assigned to non-acquisition positions, there is no clear plan for their educational development. Each career field within logistics provides fragmented information to its personnel without

defining a career education plan or certification process to manage their careers.

Newly revised AFR 36-1, Officer Classification, AFR 36-27, Acquisition Professional Development, and the new Department of Defense Manual (DOD) 5000.52M, Career Development Program for Acquisition Personnel, contain only general guidelines to develop a professional government logistician assigned to non-acquisition positions. No all encompassing Air Force logistician career development model currently exists that provides a set of phase points for the step-by-step development of personnel serving in the various logistics fields. Although there are many logistic courses and programs offered throughout the Air Force, there are no specifically identified mandatory courses or programs in Professional Continuing Education (PCE) to enhance the development of the government logistician, except for those developed for the acquisition logisticians in the APDP program.

Acquisition Logistics Career Field as a Sub-set of Logistics  
Acquisition logistics positions are normally associated with the acquisition of new weapon systems and assigned primarily to Air Force Logistics Command (AFLC), or Air Force Systems Command (AFSC).

DOD 5000.52M and AFR 36-27 apply to civilian and military logisticians working in acquisition positions only. The Acquisition workforce is a small portion of the



logistics workforce (approximately 2.7 percent or 1366 positions) within the logistics career path (1:7).

At present, there are PCE courses taught by the Air Force Institute of Technology (AFIT) that are applicable to logistic specialties. One such course is the SYS 200 Acquisition Planning and Analysis course, initially developed exclusively for acquisition program managers. Many other courses were designed for certain functional areas, such as AFIT's LOG 199, Introduction to Logistics, and LOG 260, Provisioning Management. These courses serve the purpose of providing for logistics education, but there is little continuity between them (10:5). They are individual courses not tied to any specific series or program.

Establishing Requirements. In July 1986, HQ USAF/LE requested Air University develop a Logistics Professional Development Program (LOGPDP) that would not only integrate the existing logistics courses but extend and integrate the diverse logistics specialty boundaries.

In October 1986, members of the Air Staff, Air University, and AFIT held a colloquium whereupon they agreed that recurring education in logistics fields outside of the specialty boundaries is required for the enhancement of civilian and government logisticians. One of the items of discussion was the creation of a Logistics Professional Continuing Education Program (LPCEP). This program would

provide logistic personnel a logical series of professional short courses as they progress through their careers.

Outline of a Four Tier Program. In March 1987, based on the initial requirements identified during the October 1986 conference, AFIT outlined a set of four proposed courses essential to the development of professional logisticians (17:1). The result was the development of a four tiered educational program paralleling the major phases of a logistician's career progression. These courses were not designed to be related to any one specific area within the logistics community. The intention was to broaden the knowledge and understanding of logisticians in all areas of logistics. The subject matter of the courses included: Introduction to Logistics, Combat Logistics, Strategic Logistics Management, and Senior Logistics Officer Development. The lesson content and subject matter appropriateness of the four courses was externally validated by expert senior logisticians. These experts were individuals with a background in at least two logistics specialties, an overall minimum of ten years logistics experience, were known by their contemporaries as a knowledgeable logistician, and were familiar with the Air Force logistics system (10:10). In March 1987, HQ USAF/LEXX formally became the sponsor of this four course Logistic Professional Development Program (10:5).

1. Should there be a logistics professional development model?
2. Can the APDP program, using the time phases for education, training, and experience in the ALPD, be applied to the development of an Air Force logistics career development model? If so, how?
3. Should the LOGPDP program and its proposed model be integrated into a certification process/program similar to the APDP program?

### Thesis Structure

Chapter II defines the terms logistics, military logistics, and the professional logistician, to show that logistics is a general field comprised of many specialties. A need for education beyond a specialty and Professional Development Programs are discussed including evaluation techniques.

Guidelines for career broadening are examined and the purpose of the Acquisition Professional Development program is presented. The Acquisition Logistics Professional Development Model is shown along with other logistic career broadening programs such as the Logistics Officer Professional Development program (LOPD) and the Logistics Civilian Career Enhancement Program. The LOGPDP and its four tiered program are presented along with a validation technique, followed by Air Staff, justification of the new PCE courses.

Although the courses exist, there has been no process established to integrate these courses into a phased career progression program.

#### Specific Problem

Neither the Air Force nor DOD have provided a phased career progression/certification program for personnel assigned to non-acquisition logistics career fields. The concept used to develop the APDP program is the same concept that was used to develop the LOGPDP. The intended purpose of the APDP program is to extend, integrate and broaden the logisticians' knowledge of acquisition whereas, the intended purpose of the LOGPDP program is to extend, integrate, and broaden all logisticians' knowledge of logistics. The purpose of this research effort is to determine if there should be a phased career progression/certification program or process similar to the APDP program for logisticians assigned to non-acquisition positions. The evaluation process includes examining the current APDP structure and the LOGPDP structure to verify if the APDP and LOGPDP programs can be applied, or adapted, to provide the Air Force with a logistics career development program that is applicable to all logisticians, and is similar to the career development models within the APDP program.

#### Investigative Questions

To complete the primary research objective the following series of questions will be answered:

Chapter III presents the method used to gather the data and begins with the basis of the survey approach. Survey strengths and weaknesses are discussed along with survey instrument design and sequence development. Appendix A will contain the survey cover letter and questions.

Chapter IV contains the analysis based on the compilation of data accumulated from the survey and Chapter V offers conclusions and opinions based on survey results along with recommendations for future research.

## II. Literature Review

### Logistics Defined

The United States Air Force Dictionary defines logistics as:

1. a. In an operational sense, that part of the military activity that provides for the build up and support of a military force by providing for supplies, equipment, transportation, maintenance, construction and operation of facilities, movement and evacuation of military personnel, and other like services, so as to render the military force efficient and effective in both combat and noncombat operations.
  - b. Restrictive. The furnishings of supplies and equipment.
2. In terms of military theory, the art or science of building up a military force and/or providing support by the means suggested in sentence 1, including aspects of recruitment, training, and assignment of personnel; the practice of this art or science. (20:305)

Webster's Ninth New Collegiate Dictionary defines logistics as:

1. The aspect of military science dealing with the procurement, maintenance, and transportation of military material, facilities, and personnel.
2. The handling of the details of an operation. (21:702)

Although numerous definitions of "logistics" have been advanced in various time periods, Blanchard suggests that logistics involves planning, design and analysis, production, distribution, and the sustaining support of a system or product throughout its intended life cycle (2:452). He adds that the fulfillment of logistic support objectives can be accomplished through the concept of integrated logistics support (ILS). ILS is a management

function providing the initial planning, funding, and controls which help to assure the consumer will receive a system or product that will not only meet performance requirements, but one that can be expeditiously and economically supported throughout its programmed life cycle.

Logistics more often means managing the flow of both information and the entire spectrum of materials--raw materials, components, subassemblies, and finished goods--from the suppliers, shipping, receiving, manufacturing or service activities, inventory storages, and distribution to warehouses, retailers, and finally to the ultimate consumer (3:704).

This broad conceptual view of logistics was even described in AFM 1-1 as:

Logistics is the principle of sustaining both men and machine in combat by obtaining, moving, and maintaining warfighting potential. Success in wartime depends on getting sufficient men and machines in the right position at the right time. (5:2-9)

Military Logistics Defined. Blanchard proposes that "military logistics" is basically system/product support oriented. The defense community places more emphasis on the sustaining life-cycle support of the system or product while in use by the consumer. He also contends that "business logistics" concerns itself primarily with production operations and the physical distribution of goods and services by the producer. Although these concepts have been considered adequate by their respective communities,

Blanchard maintains that neither logistics concept is suitable in today's expanding technological environment. Blanchard likes the Society of Logistics Engineers (SOLE) definition of logistics because the field of logistics has become much broader than when it was initially defined:

The art and science of management, engineering, and technical activities concerned with requirements design, and supplying and maintaining resources to support objectives, plans, and operations. (2:6)

According to Blanchard, this definition is conceptual in nature and supports the life-cycle approach to logistics yet still retains the earlier considerations of both business logistics and military logistics and is therefore a more practical definition (2:6).

The previous discussion should have provided some insight into the question, "What is logistics?" The remaining question then is "What is a logistician?"

#### Professional Logistician Defined

The simplest definition of a "military logistician" was offered by Webster's Third New International Dictionary which stated a military logistician is "a specialist in [military] logistics" (23:1330). The United States Air Force Dictionary elaborated by saying:

[A logistician is] one whose specialty or profession is planning logistics operations, or who is responsible for seeing that logistics are carried out. This term is applied by some users only to the highest level logistics planners. (20:304-305)

Moening viewed the logistician from a system's



perspective. He described a logistician as:

an individual who has the experience, training, skills and foresight to envision the entire logistics process of determining the requirement and seeing that requirement is satisfied with the right component when and where it is needed. (16:1-2).

Rutenberg believes that the logistician is an individual who provides "balanced and synchronized support" to the operational commanders in support of strategic and tactical plans (18:1). He said logisticians convert strategic plans into necessary resources through specialized functions.

Moreover, he contended:

Logisticians plan and construct airbases and facilities; they design equipment using virtually every technology; they purchase, store, package, distribute and repair aircraft, missiles, electronics, vehicles, real property, and plant equipment; they marshal a fighting unit's resources, move them to the battle area, bed them down, plug them in, and keep them fed with fuel and food. And they adapt and rearrange the resulting infrastructure to keep it in constant harmony with ever-changing strategic and tactical plans. (18:1)

There are many definitions to logistics and descriptions of logisticians, yet all have similar implications. Logistics and logisticians now span the entire spectrum of public and private organizations' production and operations functions. In the military environment, logisticians are important in sustaining the warfighting capability whereas in the commercial sector, they have supported the business operations of the organization.

Military Logistics Career Area. The Logistics Career Area encompasses program formulation, policy planning, coordination, inspection, command, direction, supervision, and technical responsibilities pertaining to Missile Maintenance, Aircraft Maintenance and Munitions, Transportation, Supply Services, Supply Management, Acquisition Contracting/Manufacturing, and Logistics Plans and Programs (6:A13-2).

AFR 36-1, Officer Classification, defines logisticians as military personnel assigned in these Air Force Specialty Codes (AFSCs):

AFSC	Title
0046	Director of Logistics
26XX	Scientific
27XX	Acquisition Program Management
28XX	Development Engineering
31XX	Missile Maintenance
40XX	Aircraft Maintenance and Munitions
49XX	Communications-Computer Systems
60XX	Transportation
64XX	Supply Maintenance
66XX	Logistics Plans and Programs

Logistics as a General Field. According to AFR 40-110 all civilian positions in Table 1 are specialty fields that are a subset of the logistics career field.

TABLE 1

## OCCUPATIONAL SERIES FOR LOGISTICS CAREER POSITIONS

SERIES	TITLE
0346	LOGISTICS MANAGEMENT
1152	PRODUCTION CONTROL
1670	EQUIPMENT SPECIALISTS
2001	GENERAL SUPPLY
2003	SUPPLY PROGRAM MANAGEMENT
2010	INVENTORY MANAGEMENT
2030	DISTRIBUTION FACILITIES AND STORAGE MANAGEMENT
2032	PACKAGING
2050	SUPPLY CATALOGING
2101	TRANSPORTATION SPECIALISTS
2102	TRANSPORTATION CLERICAL ASSISTANT
2130	TRAFFIC MANAGEMENT
2131	FREIGHT RATE
2135	TRANSPORTATION LOSS AND DAMAGE CLAIMS
2144	CARGO SCHEDULING
2150	TRANSPORTATION OPERATIONS
*0301	MISCELLANEOUS ADMINISTRATION AND PROGRAM
*0343	MANAGEMENT ANALYSIS
*0345	PROGRAM ANALYSIS
*1101	GENERAL BUSINESS AND INDUSTRY
*1601	GENERAL FACILITIES AND EQUIPMENT
*1910	QUALITY ASSURANCE
*0800	ALL ENGINEERING SERIES
*1515	ANALYST

\* Positions not normally considered logistics unless 50 or more percent of their time is spent doing logistic tasks.

It can be seen from the above table that there are many specialties within the logistics area which motivates personnel to concentrate on gaining knowledge and experience

within their individual functional specialty. This pursuit of their specialty tends to de-emphasize education and experience in the broader general field of logistics which produces personnel with plenty of experience and training in one functional area. According to Lieutenant General Leo Marquez (Ret), former USAF Deputy Chief of Staff, Logistics and Engineering,

We have "stovepiped" our logistics officers into narrow specialized logistics options. Stovepiping is the process of restricting one's growth to a specialized area. This develops logisticians with great depth but little breadth. They have no concept of the integrated logistics system. By not recognizing the need for visualization of broad-based logistics, but rather focusing in on their functional specialization, officers are reaching senior level positions unprepared to manage the totality of today's widely diverse and complex logistics systems. Logisticians require a complete sensitivity of the entire logistics spectrum. The challenge is to become a complete logistician (14:2).

The results of a survey completed in 1985 by Dawn L. Wilson show that 43.44% of the senior civilian logistics managers GS/GM-15 and Senior Executive Service (SES) in the 0346 job series (logistics management) are specialists, which means most of their experience and training is narrowed to one specialized field. At the time of the survey, there were seventy GS/GM-15s and ten SESs filling senior civilian logistics positions in Air Force Logistics Command (24:104).

### Need for Education Beyond a Specialty

Dr. Edward Deming, the man credited with revitalizing Japanese industry by emphasizing quality to management and workers, states:

It is not enough to have good people in your organization. They must be continually acquiring the new knowledge and the new skills that are required to deal with new materials and new methods of production. Education and retraining--an investment in people--are required for long-term planning.(21:84)

There will be an increasing emphasis on management education in the near future because of the sophistication that will be necessary to manage the changes taking place in logistics. Some of these changes include the rapid development of computers and software programs to help in system analysis and simulations; transportation modes and internodal usage; supply and transportation systems; factory and warehouse automation; world market competition; and communications. The logistics manager will need to be knowledgeable in cost accounting, economics, marketing, and production. There will be a need for increased communication skills and computer expertise (3:472).

Continuing education will be an important aspect of the changes in logistics. The logistics manager will have to participate in special education opportunities in order to keep abreast of the rapid changes. Continuing education will include not only logistics-related areas but also finance, general management, marketing, legal environment, and quantitative analysis (3:472).

### Professional Development Programs

Professional development programs provide stimulation necessary for creativity and for infusing new ideas into old frameworks (15:60). These programs are fertile places for new ideas because attenders are temporarily freed from the routine restraints of their normal occupations.

Changing structure can cause changing thinking patterns.

McDade cites Gardner, Starcevich, Sykes, Argyris, Cyert and Levinson:

Exposure to new ways of thinking, current theory, and subject experts permits participants to put pieces together in new and productive ways. (15:60)

In a survey conducted by Andrews and described by McDade, 6000 respondents of 39 college-based professional development programs for business executives responded, "The program broadened me," when asked what was the most significant result in their participation in a professional development program (15:69).

Opportunities and Benefits. Professional development programs provide an opportunity to look at the environment, explore trends, events, activities, and offer a better chance to understand the activities of other related areas and the world. Professional development programs also derive great benefits from the professional development of attending personnel. Faculty, staff, and administrators must set institutional goals and an integrating plan to activate them.

There must be planning and follow-through by everyone involved to reap the benefits (15:83).

#### Evaluation of Professional Development Programs

Alan Knox advocates that the most effective evaluation studies focus on selected program aspects and try to answer important and timely questions. Usually, the findings will be used to plan, improve, or justify a specific program. Mr. Knox suggests that the purpose of evaluation is to assess the extent and type of impact that a continuing education program has on the subsequent performance by its participants, the extent and impact on the clientele that they serve, or the impact on organizations in which they belong. Impact evaluation includes follow-up studies of former participants and review of time series performance data aimed at detecting improvements that can be attributed to educational participation. When the intended outcomes are realistic and reasonably attainable, impact assessment is feasible (13:68).

Mr. Knox states that the major difficulty in evaluating the impact of professional continuing education lies in documenting improvement in performance (and in related benefits to others). Evaluation studies can produce valid and useful findings if certain guidelines are followed:

1. Specify accepted standards of achievable best practice as criteria against which discrepancies from current practice (needs) and improvements in practice (application) can be assessed.
2. Select or develop valid and feasible indexes of optimal performance, which are sufficiently associated with complex and elusive outcomes of

professional continuing education that they can serve as criteria in assessments of program impact.

3. Use a time series approach that allows differences in performance before, during and after participation to be documented.

4. Establish at least one comparison sample of nonparticipant practitioners with which the group of participants can be compared.

5. Obtain from participants their subjective perceptions of program influence on the criterion measures of performance. Compare these findings with the more objective data previously collected. (13:70)

Current Problems and Future Prospects. In his article Persistent Problems and Promising Prospects in Continuing Professional Education, Griffith focuses on two key questions that are useful in analyzing the current problems in professional continuing education: How is the learning to be accomplished and what purpose is professional continuing education intended to serve?

The traditional view point is that the individual is the target of professional continuing education programs. An emerging popular viewpoint emphasizes that groups or organizations, rather than the individual, must be the learners if major changes are to take place within the professions (11:102).

Griffith states:

The most persuasive ground for providing educational opportunities to professionals is not the benefit accruing to them but rather the improved professional service their clients will receive. (11:105)



## Guidelines for Career Broadening

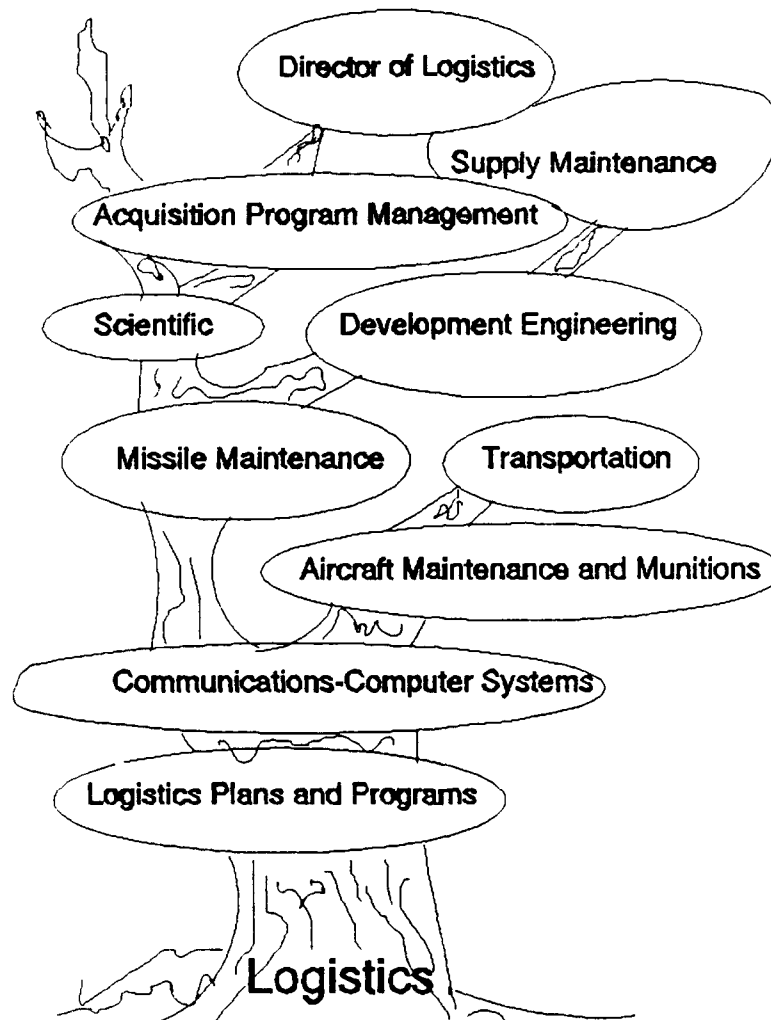
DOD 5000.52M defines career and/or professional development as:

the professional development of employee potential by integrating the capabilities, needs, interests, and aptitudes of employees participating in the career program through a planned, organized, and systematic method of training and development designed to meet organizational objectives. It is accomplished through work assignments, job rotation, training, education, and self-development. (8:vi)

DOD 5000.52M establishes the Department of Defense Career Development Program for Acquisition Personnel and governs its operation and administration. The program sets forth general requirements for merit placement, assignment, and career management. It also establishes minimum education, training, and experience requirements for specific acquisition work force job series, career fields, or specialties. The manual applies to government personnel in acquisition career fields, specialties, or identifiers. It also applies to military personnel not holding an acquisition career field specialty, or identifier but who are assigned to acquisition positions described in the manual.

Multi-specialty experience is encouraged through career broadening programs. Mandatory certification levels are a requirement for all DOD components and they must meet the minimum education and training requirements established in this manual (8:3).

are a requirement for all DOD components and they must meet the minimum education and training requirements established in this manual (8:3).



**Figure 1 Logistics Tree According to  
AFR 36-27 Acquisition Logistics  
Professional Development Model (ALPDP)**

### The Logistics Tree

Many compare the field of logistics to the trunk and main body of a tree. See Figure 1, each branch of the tree is a specialty field that branches out from the trunk but is still part of the tree. The many branches of the logistics

and experience, personnel tend to narrow their focus to the specialty. This tendency to focus on a specialty is natural in the pursuit of a successful career. Currently there are very few logistics programs to tie all branches/specialties back to the trunk/logistics. Two programs established to re-emphasize the continuity between the logistics specialties are the Acquisition Professional Development Program (APDP) and the Logistics Professional Development Program (LOGPDP). Both programs were established to re-emphasize training and education in logistics. The APDP program is a series of phased mandatory career progression programs that emphasizes education, training and experience. Since APDP is intended to strengthen the acquisition corp, the only logistics included is acquisition logistics. The LOGPD program is designed to be implemented on a career progression basis. It provides personnel a logical series of Professional Continuing Education (PCE) short courses as they progress through their careers.

#### Purpose of the APDP Program

The purpose of the APDP program, mandated by public law 99-661, is to maximize the professional development and mission capability of the acquisition officer force by setting forth a definitive and viable professional development management plan that produces broad-based managers capable of assuming middle and senior management roles in support of acquisition (7:7). The program requires specific phased

education, experience and training within logistics career fields along with a certification process to monitor and guide career progression. AFR 36-27, which specifies military logistic AFSCs that are qualified to participate in the certification process, governs the implementation of the program. As previously stated, there are several career development models within the APDP program and each model may present a slightly different set of requirements in education, experience, and training necessary for certification at each of the three levels.

All the AFSCs listed in Table 2 are functional elements of the ALPD model and are governed by its requirements.

TABLE 2

ACQUISITION LOGISTICS PROFESSIONAL DEVELOPMENT  
COMMON LOGISTIC UTILIZATION FIELDS

Position Titles	AFSC	COMMON
Director of Logistics	0046	XX
Scientific	26XX	
Acquisition Program Management	27XX	
Development Engineering	28XX	
Missile Maintenance	31XX	XX
Aircraft and Munitions Maintenance	40XX	XX
Communications-Computer System	49XX	
Transportation	60XX	XX
Supply Maintenance	64XX	XX
Logistics Plans and Programs	66XX	XX

The AFSC column indicates functional elements within the ALPD model that are eligible to participate in all facets of the APDP program. The Common column are AFSCs that can be

logistic (AFR 36-1) or acquisition (AFR 36-27) AFSCs depending on assignment.

#### Acquisition Professional Development

The APDP program is based on the functional responsibility for management of nine specific acquisition disciplines which include:

1. Acquisition Logistics Professional Development (ALPD).
2. Communications--Computer Acquisition Professional Development (CCAPD).
3. Comptroller Acquisition Professional Development (CAPD).
4. Contract Professional Development (CPDP).
5. Developmental Engineering Professional Development (DEPD).
6. Manufacturing and Quality Assurance Professional Development (MQAPD).
7. Program Management Professional Development (PMPD).
8. Science and Technology Professional Development (STPD).
9. Test and Evaluation Professional Development (TEPD) model.

The functional manager for each discipline has determined the unique acquisition education, training, and experience needed to perform acquisition duties in advancing levels of complexity, and responsibility, and has developed a career progression model as guidance for each of the functional areas.

Each model presents the requirements necessary in education, assignments, and training for certification at Level I, II, or III. The certification requirements are cumulative; that is, requirements for any lower level must be met before an individual may apply for certification at a higher level. For example, all requirements listed for

Levels I and II must be met before applying for Level III certification. The one exception to this process is the Comptroller Acquisition Professional Development model which requires a specific grade level or rank to qualify for advancement between levels. Training alternatives differ between models and personnel can be certified in more than one model. The ALPD model alternatives include the following:

- a. Completion of the masters degree in Logistics fulfills all specialty course training requirements.
- b. Award of the Society of Logistics Engineers certificate for certified professional logistician fulfills two specialty course training requirements.
- c. Two years of operational experience fulfills the Logistics Orientation Course requirements.
- d. For Level III certification, the one year of program office (PO) experience may be concurrent with acquisition logistics experience.

Defense Acquisition Improvement Act of 1986, Sections 932  
and 934. Within the APDP, the Acquisition Logistics Professional Development model applies to all AFSCs that are categorized as logistic career fields but only allows personnel assigned to acquisition logistic positions to enter the program. There are six logistic AFSCs that are included in the ALPD model which is depicted by Table 2:

1. AFSC 0046--Director of Logistics
2. AFSC 31XX--Missile Maintenance
3. AFSC 40XX--Aircraft and Munitions Maintenance

4. AFSC 60XX--Transportation
5. AFSC 64XX--Supply Maintenance
6. AFSC 66XX--Logistics Plans and Programs

#### Specialized functional areas

Logisticians are assigned to specialized functional areas within the broad field of logistics. An example of a specialized functional area is the AFSC 40XX, Aircraft and Munitions Maintenance Officer. Persons assigned to this specialty will receive specialized training and education within the aircraft maintenance and munitions field, however, as the officer matures and progresses in their career field of logistics, additional training, experience and education in other logistics functions are required for those persons to successfully perform their job. These additional requirements are available but have not been identified or incorporated in any specific program.

#### Acquisition Logistics Professional Development Model

The Acquisition Logistics Professional Development model is one of nine models in the APDP program and its requirements are depicted in Table 3.

TABLE 3

## ACQUISITION LOGISTICS PROFESSIONAL DEVELOPMENT

TRACK LEVEL	I	II	III
EDUCATION	BACHELOR'S DEGREE	BACHELOR'S DEGREE	MASTER'S DEGREE
ASSIGNMENTS AND EXPERIENCE	1 YEAR ACQUISITION LOGISTICS	5 YEARS WITH A MINIMUM 2 YEARS ACQUISITION LOGISTICS; 2 YEARS, SUPPORT, MAINTENANCE, OPERATIONS, ACQUISITION SYSTEMS	7 YEARS WITH MINIMUM 3 YEARS ACQUISITION LOGISTICS WITH 1 YEAR MINIMUM PO; 2 YEARS SUPPORT, MAINTENANCE
TRAINING	FUNDAMENTALS OF ACQUISITION (ATC), OR WSYS - 100; WSYS - 200; 1 SPECIALTY CRS	DPML CRS, OR WSY - 225; WSYS - 400; LOG ORIENT CRS; 3 SPECIALTY CRS;	DSMC - PMC DESIRED

(7:16)

All personnel assigned to acquisition positions in the logistics specialized AFSCs will be required to use the ALPD model depicted by Table 3.

Progression and Certification

According to Table 2 and Table 3, personnel in the 40XX AFSC, (Aircraft and Munitions Maintenance), assigned to an acquisition position are required to have the following representative assignments in career broadening, educational requirements, and training. In Assignments and Experience; 1 year maintenance, support operations or acquisition systems, in Education; a bachelor's degree is required for officers and desired for civilians; in Training; completion



of these courses; Fundamentals of Acquisition or SYS - 100 (Introduction to Acquisition Management), SYS - 200 (Acquisition Planning and Analysis), and 1 Specialty Course.

System 100 - Introduction To Acquisition Management.

Training progression within the ALPD model at Level I begins with SYS 100 - Introduction to Acquisition Management. The course is designed to meet the needs of persons entering the field of acquisition for the first time. Current concepts and problem areas in the acquisition process are explored. The target audience is O-1 and above, enlisted personnel E-5 and above, and AF civilians (GS-7 and above) who are newly assigned to a position in a program office, or on the acquisition management staff.

System 200 - Acquisition Planning and Analysis. The next required acquisition logistics training is SYS 200. In other models within the APDP program, SYS 200 is required at Level II whereas with the ALPD model both SYS 100 and SYS 200 are required for a Level I certification. In order to enroll in SYS 200, SYS 100 or equivalent must be completed. The course builds on the overview of acquisition management which the student obtained from SYS 100, and from work experience in an acquisition job. There are practical System Program Office (SPO) processes such as generating a Program Objective Memorandum (POM), writing a Statement of Work (SOW), using cost estimating resources, analyzing contractor performance and developing planning networks.

The target audience is O-3 or above, AF civilian GS-9 and above, or E-6 through E-9.

System 400--Advanced Program Management. In the ALPD model, this course is required for a Level II certification. In other models within the APDP program, System 400 is not required to be taken until Level III. The course is designed to help middle managers understand their role and apply problem solving and decision making techniques to acquisition management problems. Project team building, developing program strategy and concept application is applied. The target audience is Captain or above, GS-9 and above.

#### Logistic Career Broadening Programs

There are professional career development programs designed for logisticians working in non-acquisition positions that are part of a career management plan. Four such programs are the Logistics Officer Professional Development program (LOPD), the Logistics Plans Enlisted Enhancement program (LEEP), the Logistics Civilian Career Enhancement Program (LCCEP) and the Logistic Professional Development Program (LOGPDP).

Logistics Officer Professional Development Program. A recently implemented Logistics Officer Professional Development Program, is a program conceived by logisticians for logisticians. This program offers an opportunity to

gain valuable hands-on experience and professional training in another logistics discipline without the fear of forced cross-training or loss of primary AFSC. The expressed purpose of the program is to build an experience base and make more effective leaders by increasing understanding of the logistics business. This is done by screening eligible officers and selecting them for a tour of two to three years in a secondary logistics specialty; i.e., aircraft maintenance, supply, transportation, or logistics plans. After completion of the tour and award of a second AFSC, a follow-on assignment to their primary AFSC is expected. The program is designed to strengthen the logistics officer experience base by award of a multiple AFSC (12:1).

Logistics Plans Enlisted Enhancement Program. The purpose of this program is to foster and promote high standards of personal achievement, education, training, and experience in the enlisted ranks of the Logistics Plans AFSC. In support of the basic objective, a subordinate objective is to attract, select, develop and retain on a long-term basis a highly qualified enlisted work force capable of performing current and future Logistics Plans functions. AF/LEXX exercises overall responsibility for the LEEP program. The focus of this program is on the Logistics Plans AFSC.

Logistics Civilian Career Enhancement Program. A third program, which focuses on all the civilian logistics AFSCs

is the Logistics Civilian Career Enhancement Program (LCCEP). The basic purpose of this program is to develop highly skilled professional civilian logisticians to meet current and future mission needs, through a central career development process. The program is an Air Force program administered for logisticians by logisticians. The LCCEP positions represent the length and breadth of the total logistics community. That community includes all series listed in TABLE 1. Advancement within the program is accomplished through a matching of a person's current and previous skills to a Promotion Evaluation Pattern (PEP). If the person has the skills required of the position PEP and is otherwise eligible, they will be selected to fill the position.

Within the LCCEP program are opportunities for career broadening assignments and training programs. Section M of AFR 40-110 Volume IV addresses the Acquisition Logistics Professional Development program. It is not a new career enhancement program but is a subset of LCCEP. It is structured to operate as a Part of the overall Air Force APDP. The certification process used in the APDP program is also utilized in the certification of civilians for APDP. Two previously mentioned programs, LOPD and LEEP, do not combine experience, education and training in a phased relationship to enhance and develop the logistician. The LCCEP program, specifically its subset for acquisition, combines experience, education and training in a phased

career progression process. Another career progression program which offers a phased educational process is the Logistics Professional Development Program (LOGPDP).

Logistics Professional Development Program. Through meetings between the Air Staff functional management working groups, and the Air Force Institute of Technology (AFIT) the development of a logical educational process for professional logisticians reached maturity with the establishment of the Logistics Professional Development Program (LOGPDP). It is a program designed by AFIT to offer an opportunity to gain valuable education in logistics by concentrating on logistics professional career development through a phased academic educational process. The Logistics Professional Development Program (LOGPDP) is designed to be implemented on a career progression basis. This program is a four tiered educational program paralleling the major phases of a logisticians' career progression. The courses begin with an introduction to logistics and culminate with a senior executive logistics course. These continuing series of courses are built upon a foundation established in the first tier. Topics are introduced and discussed in one tier, and followed with more in-depth analysis in subsequent tiers. Each sequential course of the LOGPDP builds upon the knowledge acquired in the preceding course.

The courses start at the entry level and progress in depth of knowledge and breadth. Students enrolled in the first tier of the LOGPDP are new to the field of logistics and have diverse backgrounds. Because of their lack of a common background, the initial course provides the foundation of knowledge for the remaining tiers (10:22).

LOG 199 - Introduction to Logistics. This initial course is designed to provide a conceptual overview of Air Force logistics to include the environment, organizations and planning, as well as an examination of the integration of logistics system, functions, principles, processes, and issues. The primary objectives are:

To provide logisticians newly assigned to the logistics field with a broad based introduction to logistics including its roles, and meaning, environment, principles, processes, and functions (10:23). The target audience is officers in the grades of 2nd Lieutenant through Major, civilians in the grades of GS-5 through GS-12 and enlisted personnel in the ranks of Technical Sergeant through Chief Master Sergeant.

LOG 299 - Combat Logistics. This course provides logisticians with an overview of combat logistics plans, strategies, and procedures that will likely be implemented in a wartime scenario. It is designed to provide an understanding of how logistics contributes to the overall war effort and war requirements. One of the primary objectives is to provide a structured orientation in the

wartime roles and responsibilities of logisticians (10:24).

The prerequisite for this course is careers in the rank of Captain, civilians in the grades of GS-9 through GS-13, and enlisted in the ranks of Master Sergeant through Chief Master Sergeant.

LOG 399 - Strategic Logistics Management. This course was established to broaden and deepen student understanding of logistics doctrine, policies, processes, programs, planning, functions, and current initiatives. It emphasizes logistics as a system through analysis of the interrelationships of acquisition, wholesale support, operational support, inter-service, and allied logistics. The primary objective is to broaden student understanding of the total logistics "system" (spectrum) from the national through operational levels (10:26).

The prerequisite for this class is officers in the ranks of Major and Lt Colonel, civilians in the grades GS/GM-13 and GM-14, and enlisted in the rank of Senior Master Sergeant and Chief Master Sergeant.

LOG 499 - Senior Logistics Officer Development. This course was designed to provide senior logisticians the opportunity to examine management systems and values affecting Air Force programs. Policies, organizations, and issues currently affecting logistics will be discussed within the context of Air Force and DOD logistics systems. One of the primary objectives of this course is; To offer

the most effective ways of assessing and influencing organizational and interpersonal behavior (10:28).

The prerequisite for course attendance is officers in the rank of Lt Colonel and Colonel, and civilians in the grades of GM-14 and GM-15. No enlisted ranks are eligible to attend.

#### Validation of the Logistics Professional Development Program

The objective of a thesis written by Captain Grabowski was to validate externally, through the use of expert senior Air Force logisticians, the appropriateness of the subject matter taught in the four tiers of the AFIT Logistics Professional Development Program (LOGPDP). To complete the research objectives, a series of questions were asked to expert senior military logisticians with a 65% response rate (10:9).

Based upon the analysis of the responses, it was determined that the current LOGPDP will be a tremendous aid in the successful development of Air Force logisticians. The four tiers achieved consensus of 88%, 85%, 93% and 87% respectively (10:vii).

#### Justification of Professional Continuing Education.

The Air Staff provided justification for the establishment of the four professional continuing educational courses by stating that improving combat support has generated a new awareness of the need to develop a conceptual overview of Air Force logistics for personnel initially assigned or



pending assignments to logistics career specialties. LOG 199 will fill a long standing void for an Air Force introductory logistics course. Personnel previously relied on attending as many diverse specialty AFIT, Air Training Command (ATC), and other Defense Management Education and Training (DMET) courses as their schedules and course availability would allow (17:2).

### III. Methodology

#### Basis of the Survey Approach

The primary source data collection methods available to the researcher were the mail survey, personal interview, and the telephone interview. To determine if there should be a phased career progression/certification process similar to the APDP for logistics personnel assigned to non-acquisition positions, the researcher selected the mail survey as the best method to use. A mail survey will be sent to specific Major Commands which employ logisticians. Six to ten functional personnel resource managers at the LG and Directorate level will be the target audience chosen to receive the survey questions. Personnel working for these experienced logistic senior level managers will be one of, or assigned to one of these six logistics specialties; Director of Logistics, Missile Maintenance, Aircraft and Munitions Maintenance, Transportation, Supply Maintenance, or Logistics Plans and Programs. The survey will contain a brief overview of the APDP program and ALPD model along with a proposed LOGPDP model. Questions pertaining to both models will be collected for analysis.

#### Survey Strengths

While mail survey data gathering techniques may be somewhat less preferred to the personal interview; time, distance, accessibility, and monetary constraints necessitate using this method. No attempt will be made to

use a telephone survey due to the high costs incurred with lengthy long distance telephone conversations and the extensive manhours necessary to extract the large amounts of data required from each respondent. Initially, the telephone will be used to establish points of contact at each Major Command surveyed and to give a pre-briefing on the mail survey. One of the advantages of a mail survey is that respondents can consider responses at length--something that is not easily done using the personal interview or telephone data collection methods.

Emory in his book titled Business Research Methods, states;

The great strength of questioning as a data collecting technique is its versatility. It does not require that there be a visual or other objective perception of the sought information by a researcher. Indeed, abstract information of all types can be gathered only by questioning others. One can seldom learn much about opinions and attitudes except by questioning. The same can be said for intentions and expectations. (9:158)

Mail surveys are typically perceived as being impersonal, which provides an opportunity for respondents to express opinions that are outside the norm without fear of repercussions.

#### Survey Weakness

The major weakness of using the mail survey as a data collection technique is the lack of response. Mail surveys with a return of 30 percent are often considered satisfactory (9:172). Other limitations include respondents

providing an opinion on a question for which they have no knowledge in an effort to "complete" the survey. By having the respondents set up a point of contact at their local level, and using the Air Force distribution network, along with an autovon phone number in case of misunderstanding or clarification, we hope to circumvent most of the weakness.

#### Survey Instrument Design

The survey questions were developed using the Acquisition Logistics Professional Development (ALPD) model (one of the nine models in the Acquisition Professional Development Program) and the Logistic Professional Development Program (LOGPDP) model, which are the only two professional development programs that employ a series of phased continuing professional educational courses as their basis for education and training. Measurement questions will be used to break down the investigative questions to their lowest level. The respondent's beliefs of implementing a career development program for non-acquisition logisticians along with responses to specific measurement questions, will provide answers to the investigative questions.

#### Sequence of Survey Development

In the process of developing the survey, question content and wording will be closely monitored to ensure minimum bias. The survey purpose, background and a brief overview of the APDP and LOGPDP programs will accompany the

survey questions. A brief analogy of the primary objectives, and target audience will be described prior to the questioning on each appropriate Air Force Specialty Code (AFSC) and model proposed or used. Using this method of leading the questions with an analogy will help the respondent to understand the question asked, the requirements within each certification level, and the differences between the requirements at various levels.

#### Survey Validity

The survey content validity is the degree to which a measuring instrument provides adequate coverage of the topic under study. "Validity refers to logically correct or appropriate to the end in view" (22:1302). Because the intent of this research project is to determine if there should be an additional certification process or program for logisticians assigned to non-acquisition positions, the questions need to be specific enough to provide a clear understanding of the current certification process and relationships to education, experience and training.

#### Demographics Portion

The first series of questions will collect demographical and background data on each respondent (survey population). Since the respondent's current assignment, and logistics experience is unknown to the researcher, verification of the respondent's background in logistics is

required. This is to insure that the respondents to the survey are at the desired supervisory and experience level.

### Scales

To measure the responses by opinion or preference, an ordinal scale was chosen. Ordinal scales are those which indicate magnitude relationships of greater than or lesser than values. The most frequently used form is the Likert Scale (9:258). The Likert scale was chosen because it is simple to construct and easy to interpret. Emory suggests Likert scales provide higher reliability and provide a greater volume of data than the Thurstone scale (9:258). A five point scale was used because it provided respondents the opportunity to respond with a degree of approval/disapproval or indecision. The Likert scale used for this research is provided as Figure 2.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E
(1)	(2)	(3)	(4)	(5)
-----				
Figure 2. Five Point Likert Scale				(9:246)

### Survey Population Description

The researchers' definition of experienced logistic senior level managers are individuals with a background in a logistics specialty, an overall minimum of five years logistics experience, familiar with the Air Force logistics system and are supervising at least one or more personnel

within the logistics AFSCs. Survey respondents at this level were required because it was felt that the senior manager would have a better understanding of the educational needs of the logistician.

Since there was no way to insure the survey population fit the desired population, and it was not possible to identify the senior level managers by any single characteristic, job title or position they held, but rather by their combination of experience and job level, it would be too difficult to determine the number of senior level experience logisticians that fit this description.

It was not necessary to identify the number of respondents because a random sample population was not required or desired for this survey. Since the primary objective of this survey was to determine if a phased career progression/certification program was needed for all logisticians, using a collection and evaluation of opinions derived from experienced logistics senior level managers, a nonprobability sampling met the sampling goal. A nonprobability sampling is non-random, meaning that not all members fitting the overall population goals have a chance of being included in the sample population. Instead the population was selected based on their current assignment and position.

### Sampling Method

To pick a nonprobability sample that follows the requirements of this study, a method was needed to determine the sample size required. This was done by employing the Central Limit theorem. The Central Limit Theorem states:

If the sample size ( $n$ ) is sufficiently large, the sampling distribution will approximate the normal probability distribution, If the populations normally distributed, the sampling distribution will be normal regardless of sample size. (18:162)

In order to obtain the minimum sample size of 30 recommended by the Central Limit Theorem, the sample will be expanded to 68 to allow for a non-response rate.

### Data Collection

A survey package will be mailed out during the second week of December to the sample population of experienced logistics senior level managers. The survey package will contain the following parts:

- 1) A cover letter explaining the respondents' position was recognized as a logistics senior level managerial position and therefore the target for the survey. The purpose of the survey (to answer investigative questions) was also explained (see Appendix A: Cover Letter). A respond no later than date, or deadline date, was also included in the cover letter. The respondents will be allowed ten working days from the receipt to complete and mail their responses. According to Emory, inclusion of a deadline date does not necessarily increase the response



rates, but will accelerate the rate of return of surveys (9:174). The cover letter also informed respondents of Air Staff's sponsorship of the LOGPDP.

2) The four part survey instrument along with instructions required to complete and return the survey.

3) Postage paid, pre-addressed return envelopes. This will help the response rates as it provides a means to facilitate returning the surveys and ensures they are returned to the proper address.

#### Improving Main Survey Results

Emory suggests that research literature is filled with studies addressing the problems of improving mail survey returns. He cites two major review articles which appeared in 1975 by Kanuk and Berenson, which concluded;

A number of tentative conclusions can be drawn on the basis of the empirical studies reported here. Unfortunately, there is so little evidence on which to base conclusions that those which follow, though valid, appear to be weak. Follow-ups, Preliminary Notification, and Concurrent Techniques. (9:173)

In an effort to increase the response rate for this research project, several of the above mentioned techniques were employed. Preliminary (advanced) notification, that is, contacting the respondents by telephone prior to mailing the surveys was done. Follow-up phone calls will be made to remind those who intend to respond to the survey, of its importance. Other proven concurrent techniques were used such as; survey sponsorship, return envelopes and postage paid.

### Opinion Survey

This survey was based on a five-point Likert Scale, where 'A' was Strongly Disagree and 'E' was Strongly Agree. The respondents were asked to respond to 40 statements with the letter that best described their opinions. Some statements contained positive and negative approaches, serving as a check of validity to ensure the respondents were answering what was asked and not just randomly marking responses. Statement Thirty-three and Forty are examples of this.

Statement Thirty-three. The proposed AFIT LOGPDP model provides a credible logistics professional development program.

Statement Forty. The proposed AFIT LOGPDP model does not provide for a creditable logistics career enhancement program.

### Analysis Method

For the purpose of this project, the measurement questions will be shown using a histogram, which is a graphical presentation of a numerical distribution. It is a bar chart of a frequency distribution. A histogram simply consists of a set of vertical bars. Values of the variable being measured, in this case opinions, are measured on an arithmetic scale on the horizontal axis. The bars are of equal width and correspond to the equal class intervals. The height of each bar corresponds to the frequency of the

class it represents. Therefore, the area of a bar above each class interval is proportional to the frequencies represented in that class (19:59). Each of the five possible responses will be depicted on the horizontal scale.

To summarize the data using the five point Likert scale, the data will be divided into three modal classes. Strongly disagree and disagree will be combined to form one mode, neutral will be the second, and agree, strongly agree combined for the third mode. The data will be divided into these modal classes when determining if a consensus exists. Webster defines consensus as; (1) group solidarity in sentiment and belief (2) a general agreement (21:279). For the purpose of this project, a percentage of seventy or more would constitute a consensus. Grabowski in his thesis titled, Validation of the Logistics Professional Development Program by Expert Senior Military Logisticians states;

the percentage selected to be the cut-off is purely subjective In this application it merely provides a point of reference and is not to be construed as a hard and fast measurement. (10:41)

Like Grabowski, if the measurement response has a seventy percent or more modal agreement, then that measurement question is considered to have obtained a consensus.

#### Chapter Summary

This chapter described the methodology that will be used for data collection to determine the answers to the research and investigative questions. It began with the basis of the survey approach and the reasons for its selection over other

methods of data collection. Survey strengths and weaknesses were discussed along with the survey instrument design using the APDP and LOGPDP programs because they are the only two professional development programs employing a series of phased PCE short courses as their basis. Demographics (collection of data on the respondents) are discussed, along with the scales used to measure the responses. Survey population, sampling method, data collection, and finally, data analysis were also introduced. Chapter IV contains the data analysis.

#### IV. Analysis and Findings

##### Chapter Overview

This chapter examines and analyzes the data gathered during the research process. It begins with a review of the purpose and intent of the survey and ends with a summarized comment of the research findings. A sample of this survey instrument is attached as Appendix A to this document.

Survey Purpose and Intent. The initial eight statements of the survey were used to develop demographic information on the survey respondents. Information on the acquisition and logistics professional development programs were provided to the reader throughout the survey as an aid in their response. The intent and purpose of the survey was to gather sufficient data to answer these three investigative questions: (1) Should there be a logistics professional development model? (2) Can the Acquisition Professional Development Program (ALPD), using the time phases for education, training and experience in the Acquisition Logistics Professional Development (ALPD) model, be applied to the development of an Air Force logistics career development model? If so, how? (3) Should the Logistics Professional Development Program and proposed model be integrated into a certification process/program similar to the APDP program? Examination of the survey findings and analysis of the data obtained during the

research process is included, followed by an analysis of the results compiled during the mail survey.

Survey Focus. The survey examined two relatively new logistic programs; the APDP program which provides a phased career progression/certification program for personnel assigned to acquisition, and the LOGPDP program which is intended to educate and broaden the knowledge base of all logisticians but does not use any type of certification process. The focus of the survey was on the process used to monitor, train and educate government logisticians.

Survey Content. Questions 1 through 8 of the survey were designed to collect demographic data on the survey respondents and will be presented as statements 1 through 8. The responses will be presented in graphics. Thirty-two additional statements requiring attitudinal responses comprise the remaining segment of the survey. The statement numbers match the survey statement numbers and each is rewritten in sequential order followed by a graphic representation of the responses to those statements. The response for each attitudinal statement is depicted on a histogram. Each attitudinal survey response is analyzed according to the methodology outlined in the previous chapter, and if the response is related to an investigative question, a more indepth analysis is presented at the end of each survey section along with a summarized comment.

Survey Population. Two and three-letter office symbol, senior level logistic managers, assigned to various Major

Commands were the target audience for the survey. Initial population demographics were collected along with a census of attitudes, and opinions. If the respondent's supervisory level, logistics experience, and assignment matched the criteria previously defined for a senior level supervisor, the data was used for data analysis. Attitudinal questions were based on a Lickert scale using the Central Limit Theorem for a modal analysis of the returned data.

### Survey Response

Data collection was terminated on January 15th, 6 weeks after the initial survey distribution date. Fifty-two of the original Sixty-eight surveys were returned. This equated to a response rate of 76.5%. The number of returned responses is above the Central Limit Theorem recommended minimum level of thirty for nonprobability non-random sampling.

Survey distribution was accomplished by several unplanned actions. First, early in December 1991, a Major Command Logistics "Community" conference on the APDP program was hosted by the XR community at Wright Patterson AFB, OH. Attendees at this conference included many of the two-letter senior level logistic managers from the various major commands which were previously targeted as recipients for the mail survey. This was an opportune time to distribute some of the mail surveys to the attendees. During the same week, an Air Force Institute of Technology (AFIT) staff

member distributed surveys to senior-level Logistics Planners, who were attending a Logistics Planners' conference held at Hickham AFB, Hawaii. The remaining surveys were mailed to various points of contact at Altus AFB, OK., Headquarters Strategic Air Command (HQSAC) at Offutt AFB, NE., and Headquarters Tactical Air Command (HQTAC) at Langley AFB, VA. The survey population was selected based on their current assignment and position within each command and functional area.

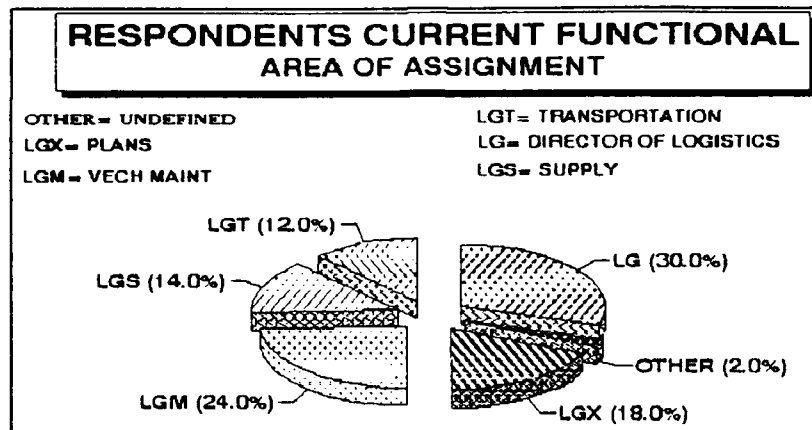
#### Respondent Demographics

The demographic collection of data from the respondents begins with their replies to statement one, are consecutive, and ends with statement eight. The overall background/experience of the respondents' are discussed before preceding into discussion of their responses.

Statement One. Indicate the functional area to which you are currently assigned. Figure 3 indicates the response.

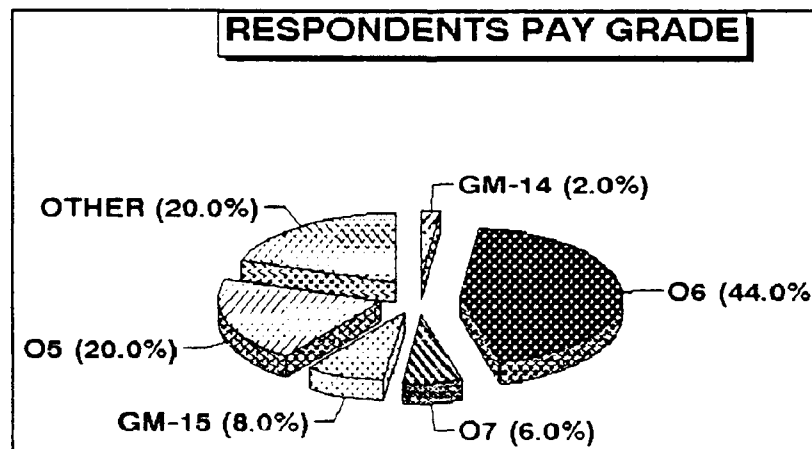
Some of the two-letter logistics functional organizations throughout the major commands no longer use the LG symbol. The alternate choice for functionals not using the LG symbol was "Other" and it was selected as a response by one person. Fifteen of the respondents were two-letter LG functionals and another eleven respondents were from the LGM community.





**Figure 3. Functional Area of Current Assignment**

Statement Two. What is your pay grade? Figure 4 depicts the various pay grades of the functionals responding to the survey. The largest group to respond in this area were the O6s/Colonels. "Other" received a twenty percent response which were write-in comments from captains or majors responding to the survey. Eighty percent of the respondents were above the rank of major and considered senior level managers.



**Figure 4. Pay Grade**

Statement Three. To which command are you currently assigned? The response is presented in Figure 5. Only seven surveys were mailed to Material Air Command (MAC) during the Christmas holidays which may account for their low response rate (2 percent) to this survey.

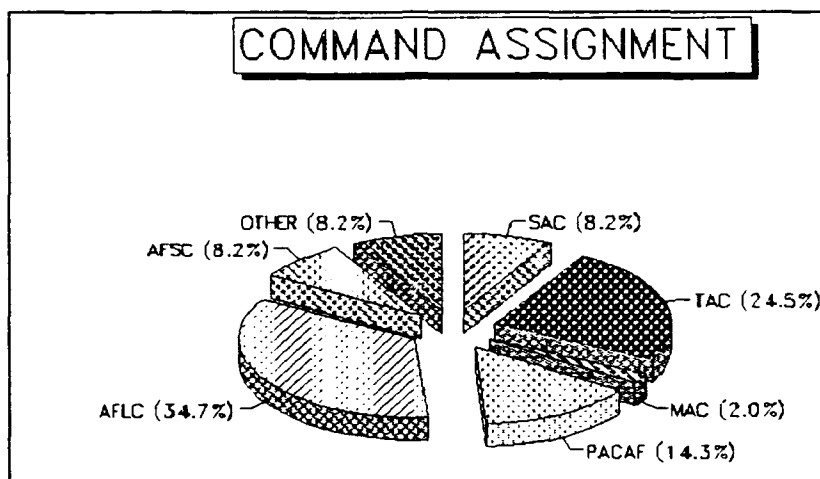


Figure 5. Assigned Command

Statement Four. How long have you held your current position? Figure 6 contains the results of this question.

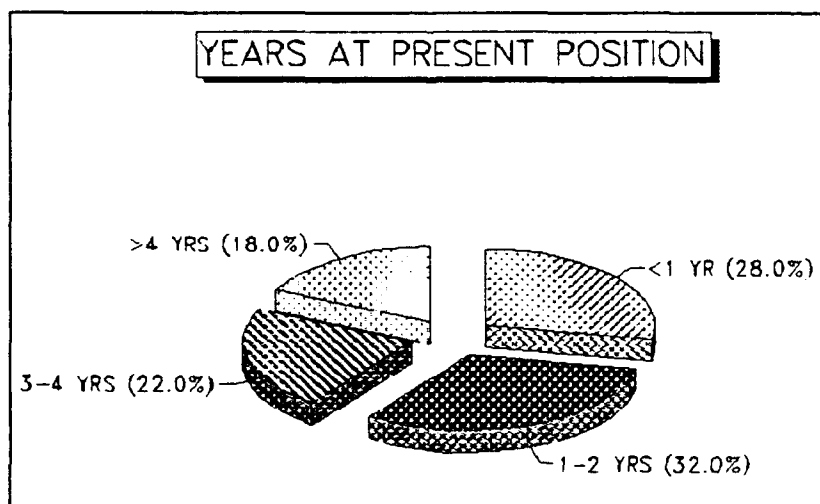


Figure 6. Assigned Current Position

This question was designed to find out current supervisory experience at their present position.

Seventy-two percent have held their current position at least one or more years and forty percent 3 or more years.

Statement Five. How many total years of experience in logistics do you have? Figure 7 contains the results. Over seventy-eight percent have twelve or more years experience in logistics. Ninety-four percent have over 5 years experience which meets the experience criteria established in chapter 3.

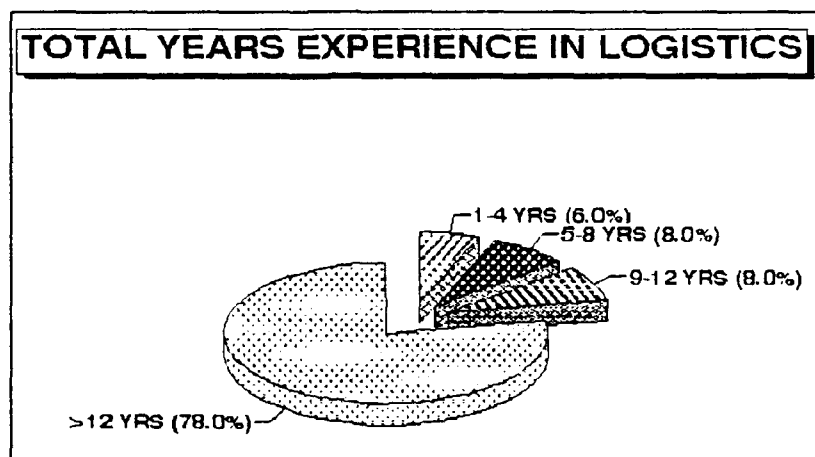
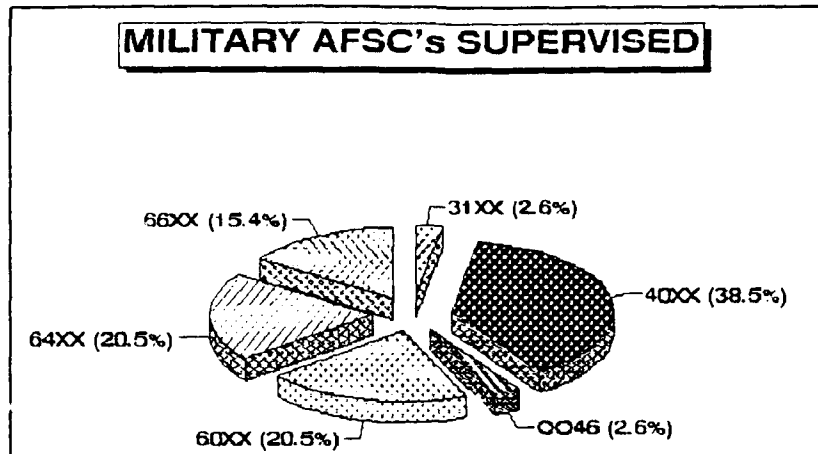


Figure 7. Total Years of Logistics Experience

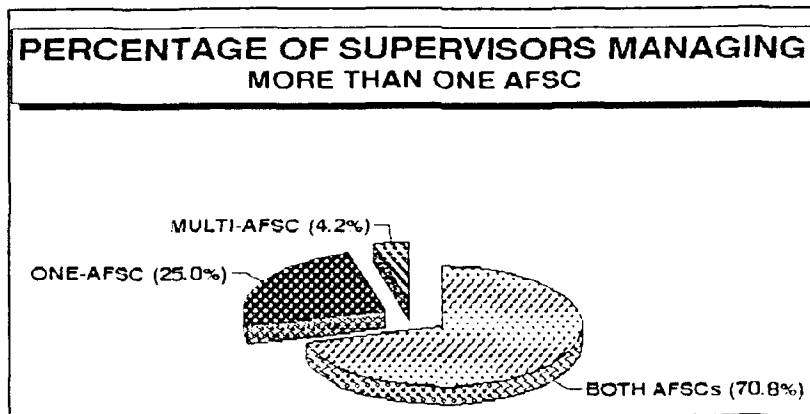
Statement Six. Which military AFSCs do you supervise? Figure 8 displays the response. (Refer to Chapter 2, Table 2) It is a listing of the various AFSC nomenclatures. Five of the respondents did not supervise any military AFSC whereas ten of the respondents supervised 2 or more AFSCs. The largest group of respondents were AFSCs 40XX, Aircraft and Munitions Maintenance personnel.



**Figure 8. Military AFSCs Currently Supervising**

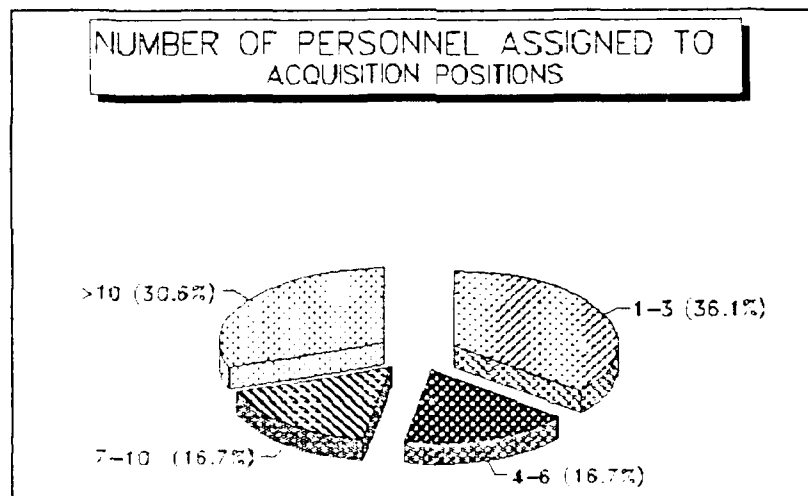
Out of the five supervisors that did not supervise any military, three of them supervised civilian employees. The data collected from the two respondents who did not supervise any personnel was not used except in the demographics portion.

Statement Seven. Which civilian job series do you supervise? The responses to this question was broken down into three different categories. The first category reflects how many respondents supervise both military and civilian personnel. The second category is how many managers supervise just one AFSC, and the final category is, how many managers supervise more than one civilian AFSC or military AFSC. Figure 9 depicts the results. Thirty-four of the respondents managed both military and civilian personnel. Twelve respondents supervised only one AFSC and two supervised more than one AFSC within the military or civilian community.



**Figure 9. Total of AFSCs Supervised**

Statement Eight. How many of the personnel under your supervision are assigned to acquisition positions? Figure 10 depicts the response. In each of the commands that responded, at least one supervisor had 1 to 3 acquisition positions assigned. The command with the largest response having the least amount of assigned acquisition positions was from PACAF. Surprisingly, one hundred percent of the respondents from SAC had personnel assigned to acquisition positions.



**Figure 10. Personnel Assigned to Acquisition Positions**

### Summary of Demographics

A portrait of the survey respondents is; a senior level manager (over 80% Lt Col and above), having 5 or more years experience in logistics, (94% with over 5 years experience), familiar with the Air Force logistics system, and supervises at least one or more personnel within the field of logistics. Seventy-eight percent of the respondents had twelve or more years experience in logistics while only 6 percent had 4 or less years experience in logistics. These qualifications matched or exceeded the criteria desired of senior level manager established in the previous chapter.

### Attitudinal Survey

The next thirty-two statements allow five graduations of response for each statement from Strongly Disagree to Strongly Agree. Section II, the first and smaller remaining portion of the thirty-two statements was designed to collect general information on the respondent's familiarity with the APDP, and the LOGPDP programs. A brief overview of both programs was provided to the respondents in the survey background information. A more focused overview of the APDP and LOGPDP programs followed, including an Acquisition Logistics Professional Development (ALPD) model, and a proposed Logistics Professional Development (LOGPDP) model. The course curriculum for LOGPDP was attached to the survey as an Appendix.

Statement Nine. I am familiar with the Acquisition Logistics Professional Development (ALPD) model which is one of nine models in the Acquisition Professional Development Program. The response is depicted in Figure 11.

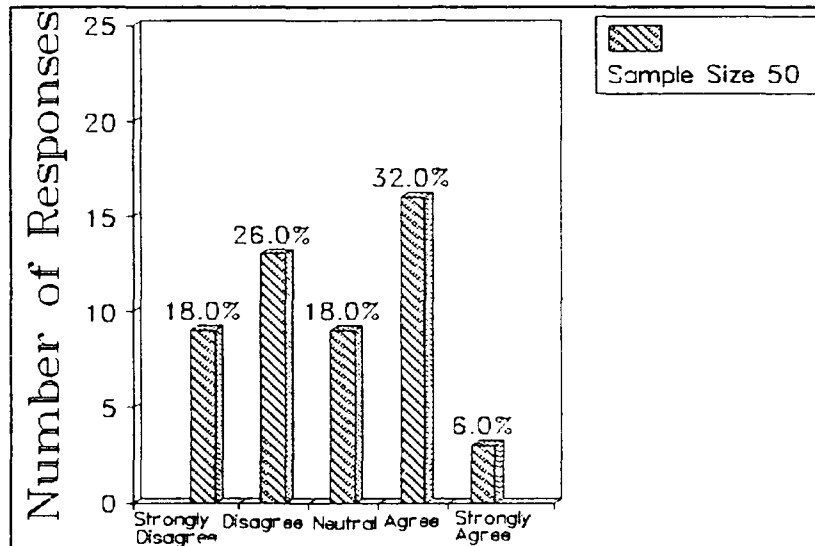
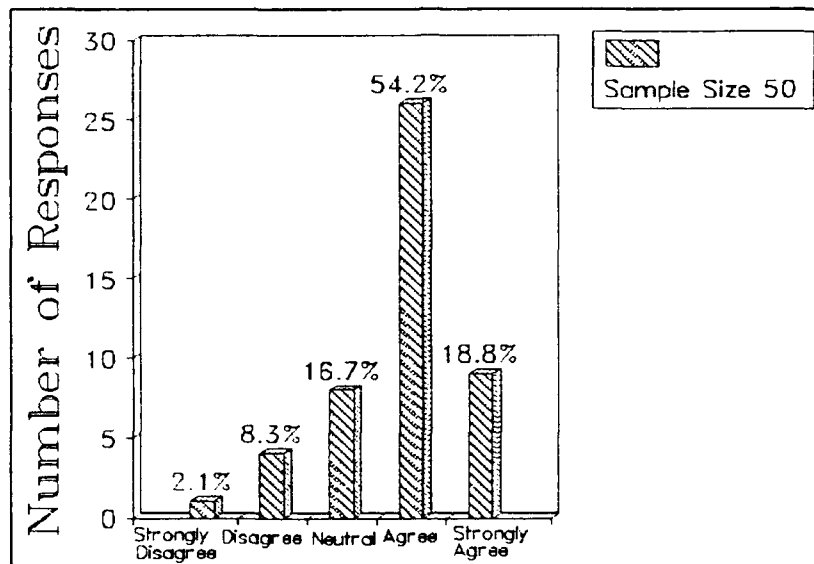


Figure 11. Familiarity With ALPD Model

Forty-two percent disagreed, thirty-eight percent agreed with this statement. Eighty-one percent of the respondents from Tactical Air Command (TAC) indicated they were unfamiliar with the APDP program. This response is not surprising since the majority of TACs' resources are involved with the operations and maintenance of systems and not procurement of systems. Seventy percent of the respondents from Air Force Logistics Command (AFLC) indicated they were unfamiliar with the APDP program which is a surprise. AFLC is one of the commands with the greatest number of acquisition positions assigned to it, and have a large number of personnel involved with the business of acquisition and support.

Statement Ten. I am unfamiliar with the LOGPDP program but after reviewing the course curriculum at attachment 1, I believe the program would benefit all logisticians. Figure 12 has the response.

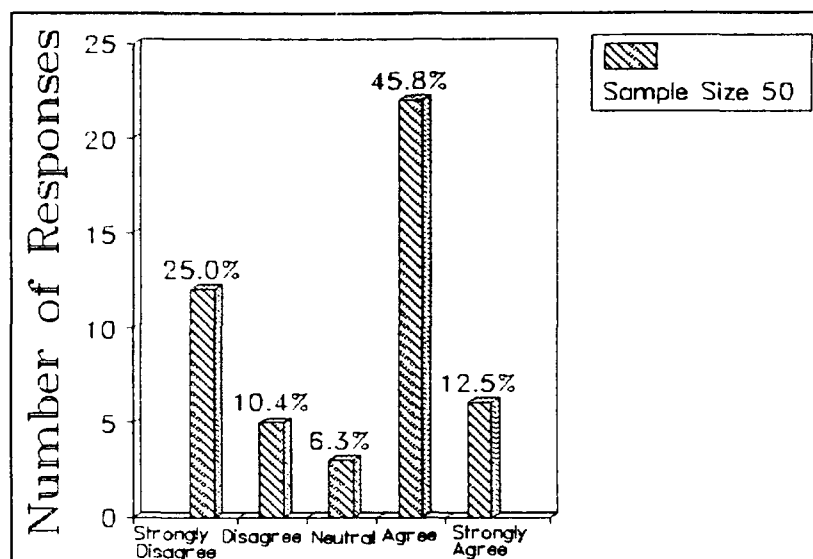


**Figure 12. Unfamiliar With LOGPDP**

A consensus (over seventy percent) of the respondents agreed that they were not familiar with the program but after viewing the attached course curriculum the LOGPDP program would benefit all logisticians.

Statement Eleven. I am familiar with the Logistics Professional Development Program (LOGPDP). Responses are displayed in Figure 13.

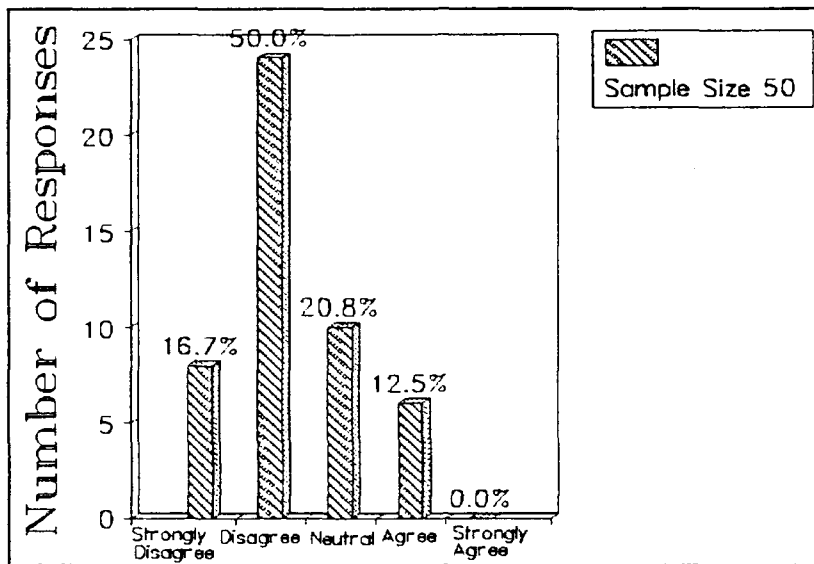




**Figure 13. Familiar With LOGPDP**

Thirty-five percent of all the respondents were not familiar with the LOGPDP program and over sixty percent of the respondents from TAC were unaware of the LOGPDP program. Both percentages are higher than expected and are a surprise. The surprising aspect of this is the LOGPDP program was initially developed to enhance logisticians assigned within the Operation and Maintenance (O & M) side of the house, yet the major commands which expend a lot of their resources in this area are unaware of a program (LOGPDP) that was initially designed for them.

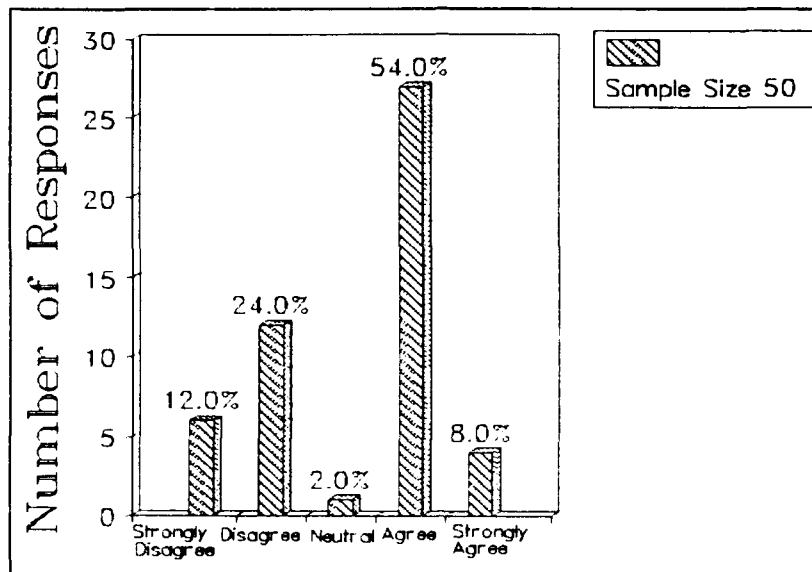
Statement Twelve. I am unfamiliar with the LOGPDP program but after reviewing the course curriculum at attachment 1, I believe the knowledge gained from attending this program would not benefit logisticians assigned to Acquisition. Response is in Figure 14.



**Figure 14. LOGPDP Not Beneficial For Acquisition**

After reviewing the course curriculum of the LOGPDP program, over sixty-seven percent of the respondents felt that the knowledge gained from attending would be beneficial to those assigned to acquisition.

Statement Thirteen. I am aware that the APDP program is only applicable to personnel assigned to Acquisition positions. Response is in Figure 15.



**Figure 15. APDP Only For Personnel Assigned to Acquisition**

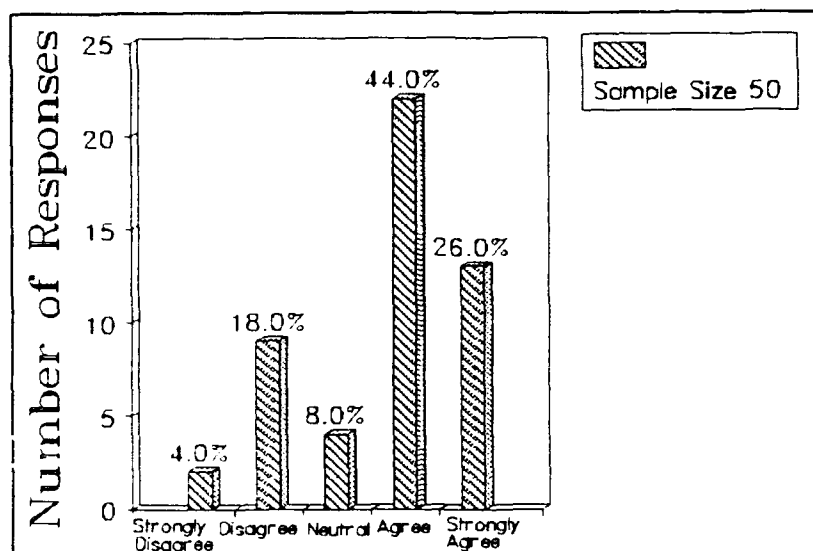
Sixty-two percent of the respondents agreed that the APDP program was only applicable to personnel assigned to acquisition positions. Thirty-six percent disagreed. With such a large percentage of respondents disagreeing, it might be an indication of a poorly worded statement. The intent of the statement was to see how many of the respondents knew that the APDP program was designed to develop an acquisition corp, which means personnel assigned to acquisition positions will have the first priority, for certification, training and etc.

### Response to Section III of the Survey

Section III statement fourteen through statement twenty-three of the survey was designed to collect the respondents opinion on who should attend each tier of four-tier LOGPDP program. This program is a four-tiered Professional Continuing Education (PCE) program paralleling the major phases of a logistician's career progression. Section III overview contained a brief description of the LOGPDP program along with the course curriculums (as an attachment) for all four inclusive PCE courses. An abstract on each of the courses was presented. This was necessary because the level of program familiarity of the respondent was unknown. As each PCE course was introduced, opinions were solicited on who should attend these courses. Should course attendance be limited to personnel assigned to non-acquisition positions or would the various courses benefit personnel assigned to acquisition positions too. Another opinion solicited throughout the survey was whether there should be a prerequisite of experience required for attendance at any of these courses.

The reply to each statement is graphically represented on a histogram following the statement. A summation of the individual statements is presented at the end of statement twenty-three.

Statement Fourteen. All newly assigned logistic personnel (except those assigned to acquisition) should attend Log 199. Figure 16 depicts response.

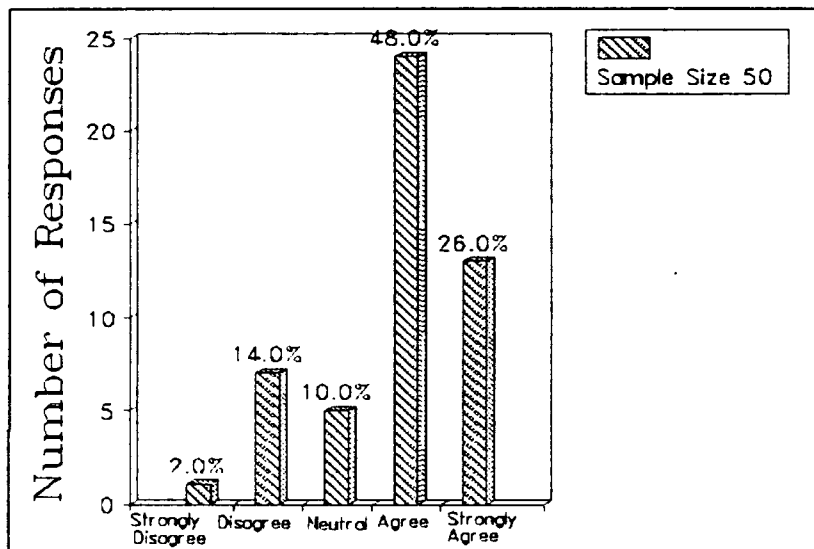


**Figure 16. All Except Acquisition Should Attend Log 199**

A consensus of agreement was reached by the respondents. All newly assigned logistics personnel (except for acquisition) should attend Log 199.

Statement Fifteen. All Acquisition logistics personnel should be required to complete Log 199. The response is depicted in Figure 17. Seventy-four percent agreed to this statement. A larger percentage agreed to this statement compared to the previous statement which indicates that all logisticians including those assigned to acquisition should attend Log 199.

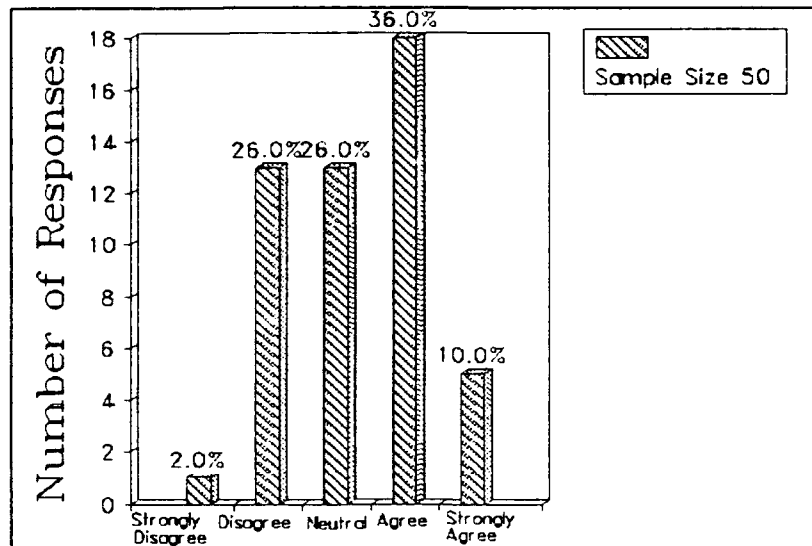
Another interesting statistic uncovered by this data is that Air Force Logistics Command (AFLC) and Air Force Systems Command (AFSC) which predominately have the most logisticians assigned to acquisition positions, agreed (by a rate of ninety-four percent, one response was neutral) that



**Figure 17. All Acquisition Should Be Required to Attend Log 199**

Log 199 should be a requirement for all logisticians to attend.

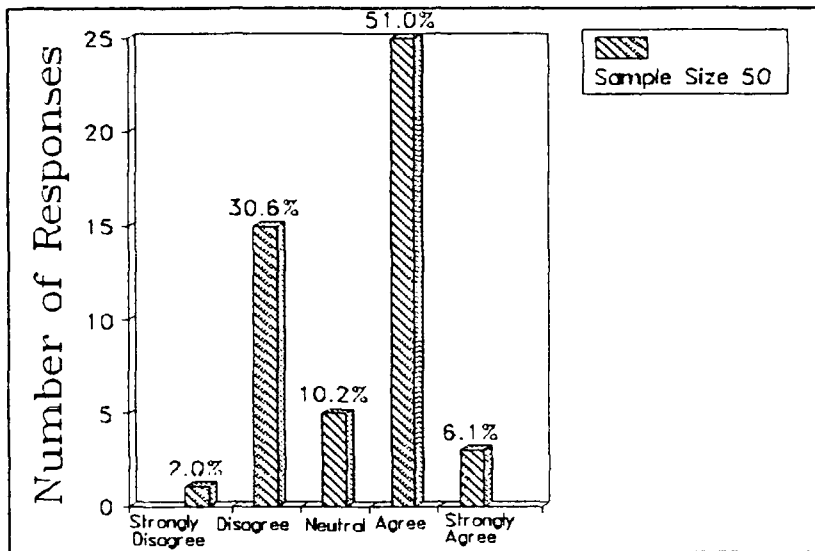
Statement Sixteen. Logistic Personnel should attend log 199 after award of primary AFSC but not before. Figure 18 contains the response. Only forty-six percent agreed, therefore attending Log 199 prior to award of primary AFSC is insignificant. Statement 16, Statement 17, and Statement 31 are all closely related. All three statements are concerned with whether a prerequisite of experience is necessary, before attending Log 199.



**Figure 18. Should Attend Log 199 After Award of Primary "Not Before"**

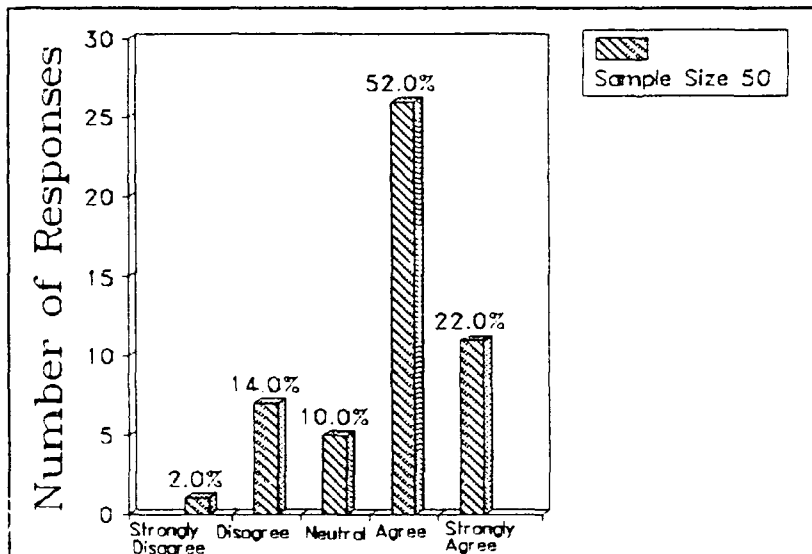
Fifty-seven percent of the respondents agreed that a prerequisite of experience is required before attending Log 199. The conclusion that can be drawn from these two statements is experience in the field of logistics is not required to take the introductory course (Log 199) but there should be a prerequisite of experience required for certification.

Statement Seventeen. There should be a prerequisite of experience before attending Log 199 (Figure 19). Fifty-six percent were in agreement, thirty-two percent disagreed. The response to Statement 31 (Figure 33) disputes this result. Eighty-eight percent of the respondents agreed there should be a prerequisite of experience for each tier of the four-tier LOGPDP program.



**Figure 19. Prerequisite of Experience Before Attending Log 199**

Statement Eighteen. All Non-acquisition logisticians should be required to attend Log 299 (Combat Logistics). Figure 20 contains the response.



**Figure 20. All Non-acquisition Logisticians Should Attend Log 299**



Seventy-four percent agreed all non-acquisition logisticians should attend Log 299.

Statement Nineteen. Acquisition logisticians should attend Log 299. Figure 21 contains the response. A consensus was reached for non-acquisition logisticians to attend Log 299. Another interesting response was, more than half (sixty-four percent) of the respondents indicated that acquisition personel should attend Combat Logistics (Log 299).

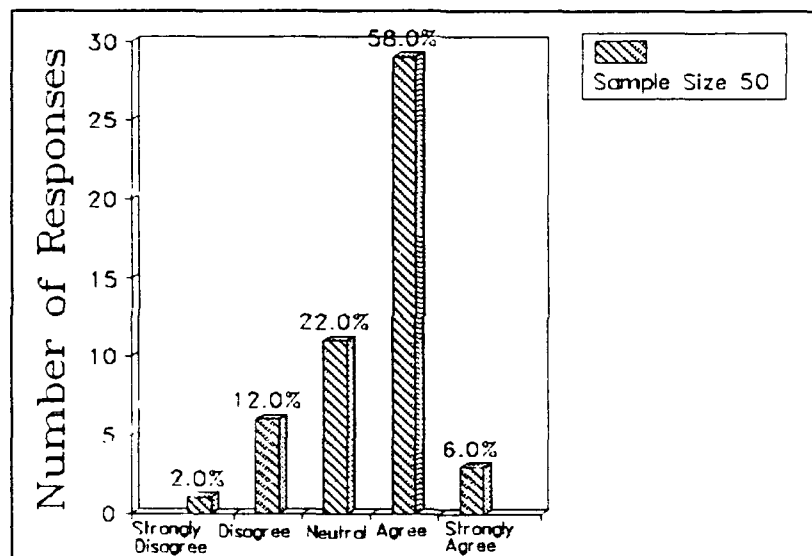
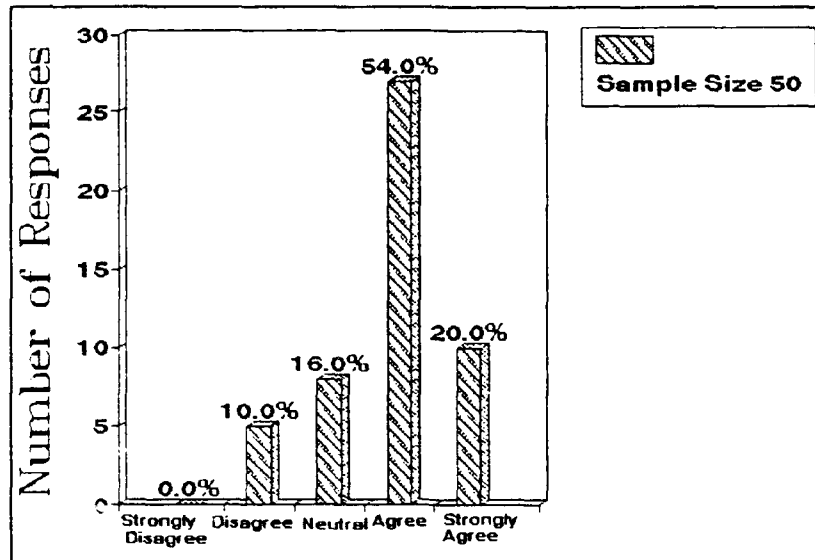


Figure 21. Acquisition Should Attend Log 299

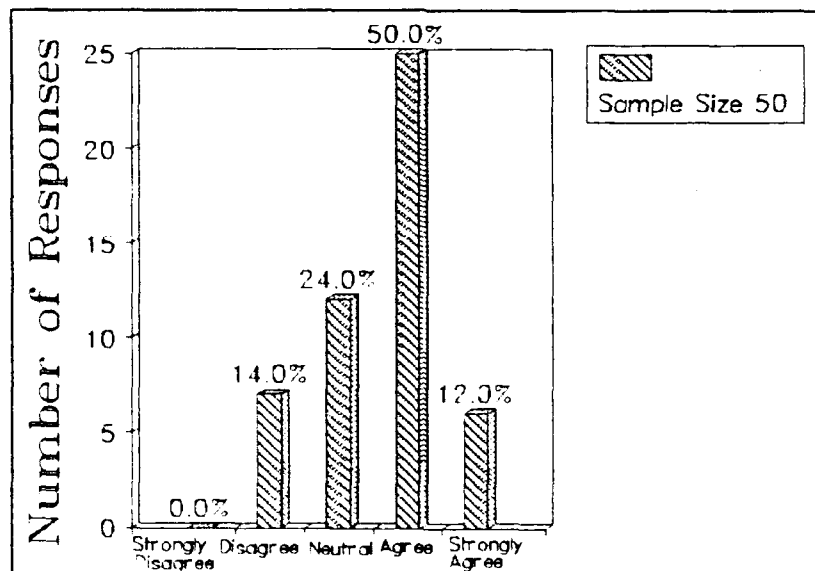
Statement Twenty. All Non-acquisition logisticians should be required to attend Log 399. Figure 22 contains the results.



**Figure 22. Non-Acquisitions Logisticians Require Log 399**

Seventy-four percent agreed that non-acquisition logisticians should attend Log 399.

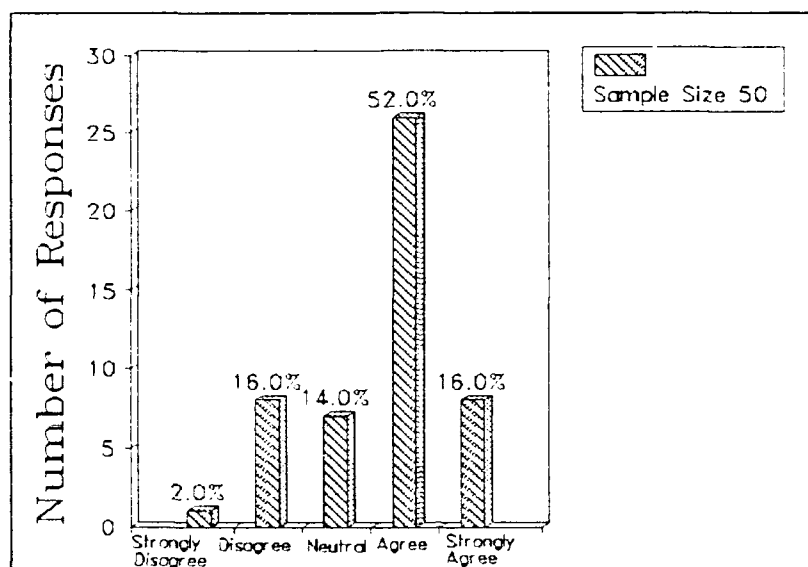
Statement Twenty-one. Acquisition logisticians should attend Log 399.



**Figure 23. Acquisition Logisticians Should Attend Log 399**

A consensus was reached, acquisition logisticians, should attend Log 399. Over half (sixty-two percent) agreed that personnel assigned to acquisition should attend Log 399.

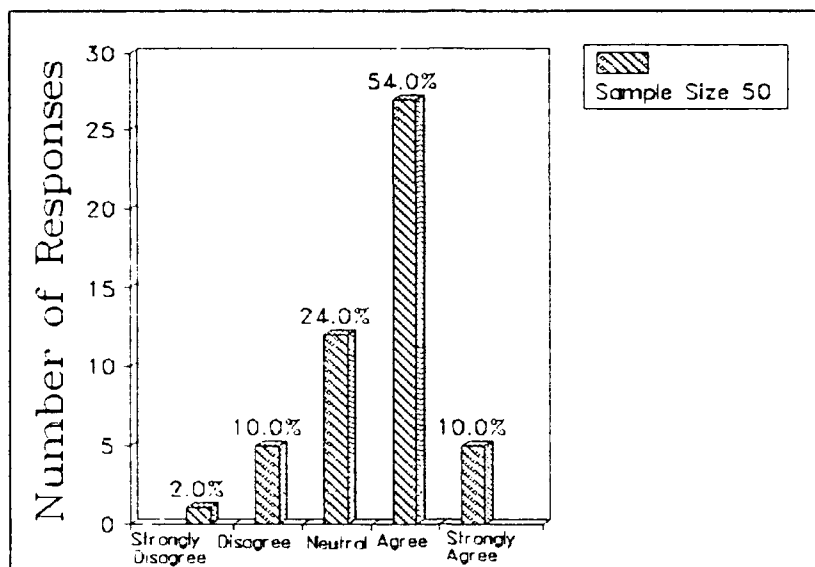
Statement Twenty-two. Non-Acquisition Logisticians should be required to attend Log 499.



**Figure 24. Non-Acquisition Logisticians Should Attend Log 499**

Sixty-eight percent agreed that non-acquisition assigned personnel should attend Log 499.

Statement Twenty-three. All logisticians should attend Log 499. Figure 25 reveals the respondents agreed by a sixty-four percent to twelve percent ratio.



**Figure 25. All Logisticians Should Attend Log 499**

#### Response Summary Section III of Survey

The general consensus for this section provided by the respondents is three of the courses; Log 199, Log 299, and Log 399 should be completed by non-acquisition logisticians. At least sixty-two percent or more of the respondents agreed that Log 199, 299, 399 and Log 499 should be attended by personnel assigned to acquisition. A consensus was reached for Log 199 attendance by personnel assigned to acquisition positions. No consensus was reached on whether experience in the field of logistics is required prior to attending the introductory PCE course (Log 199). Fifty-seven percent agreed experience is necessary prior to attending Log 199 whereas only thirty-two percent disagreed. Later, a similar statement regarding requirements of prerequisites in experience for each tier of the four-tier program was responded to differently. Statement Thirty-one received an

eighty-eight percent agreement that a prerequisite of experience is required prior to attendance at any of the PCE courses. With these two results in mind, it could mean that a prerequisite of experience between each level is required except for the introductory course Log 199.

that a prerequisite of experience between each level is required except for the introductory course Log 199.

#### Section IV Of The Survey

Survey questions twenty-four through thirty are based on the ALPD model and the proposed LOGPDP model. The LOGPDP model (derived from the LOGPDP program) is structured similar to the ALPD model, and both were presented to the respondents as an aid in understanding the requirements of each program. Statements comparing education, training and experience requirements of each model were introduced and opinions were solicited. A summary of Section IV of the survey will be provided at the end of statement thirty.

Statement Twenty-four. Educational requirements for certification at levels I, II, and III should be the same for both the ALPD model and the LOGPDP model.

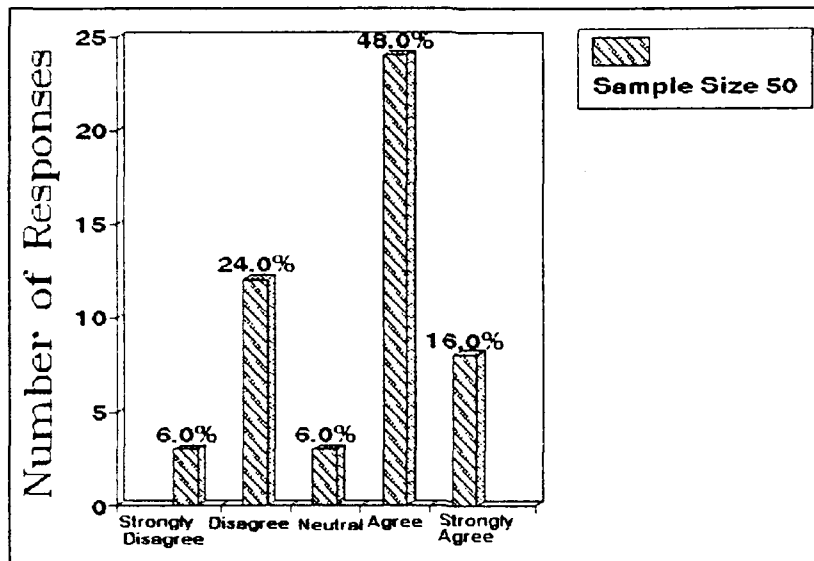


Figure 26. Same Educational/Certification Requirements For ALPD and LOGPDP programs

Figure 26 reveals sixty-four percent in favor of the same educational requirements at each level of certification for both the ALPD and the LOGPDP models.

Statement Twenty-five. It is appropriate for certification level I (LOGPDP model) to require 1 year assignment/experience in logistics. Figure 27 contains the results.

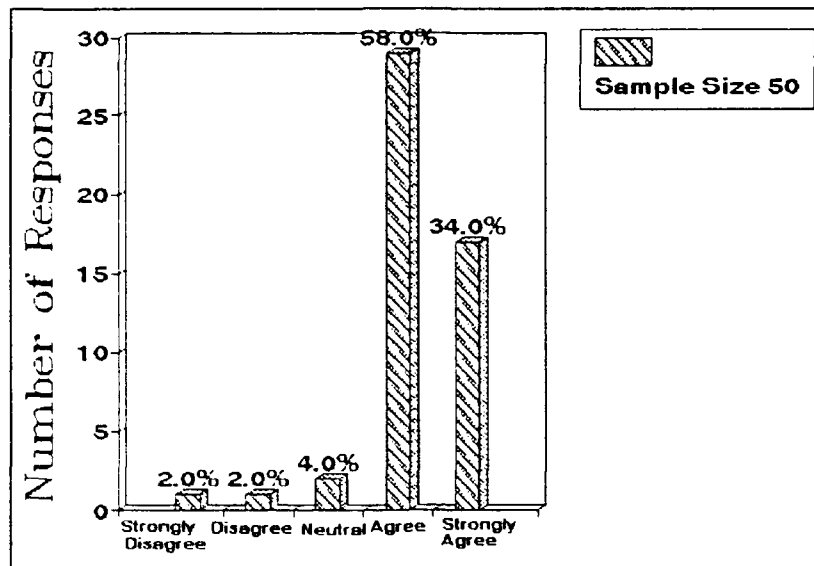
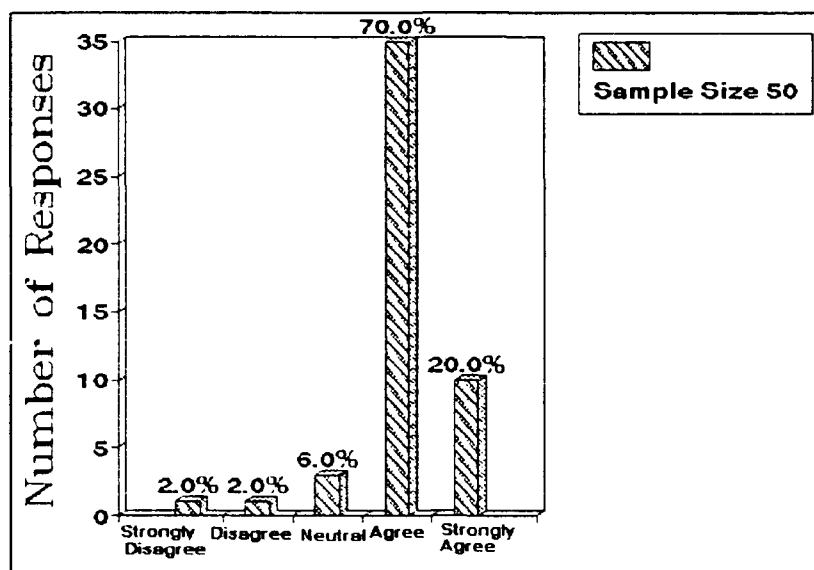


Figure 27. 1 Year Experience In Logistics  
For Certification Level I

Ninety-two percent agreed with the requirement of at least one year experience in logistics for Level I certification.

Statement Twenty-six. Appropriate assignments/experience in logistics for level II certification should be 5 years minimum in one or more logistics AFSCs. Figure 27 indicates response.



**Figure 28. Level II Experience Should Be 5 Years In At Least 1 Logistics AFSC**

Ninety percent agreed that at least 5 years experience in one or more logistics AFSCs should be required for Certification Level II.

Statement Twenty-seven. An appropriate assignment/training for certification level III (LOGPDP model) is 7 years logistics, 3 years minimum experience in one or more Logistics AFSCs. Seventy-eight percent agreed as represented in Figure 29.



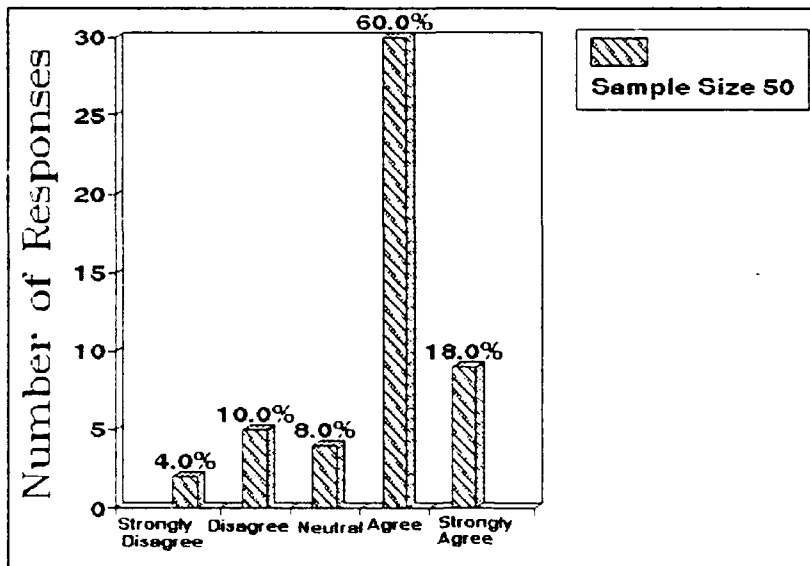


Figure 29. 7 Years Logistics, 3 Minimum Experience

Statement Twenty-eight. Certification level I (LOGPDP model) training requirements for logisticians are compatible with the level of requirements for the ALPD model. Figure 30 contains the response.

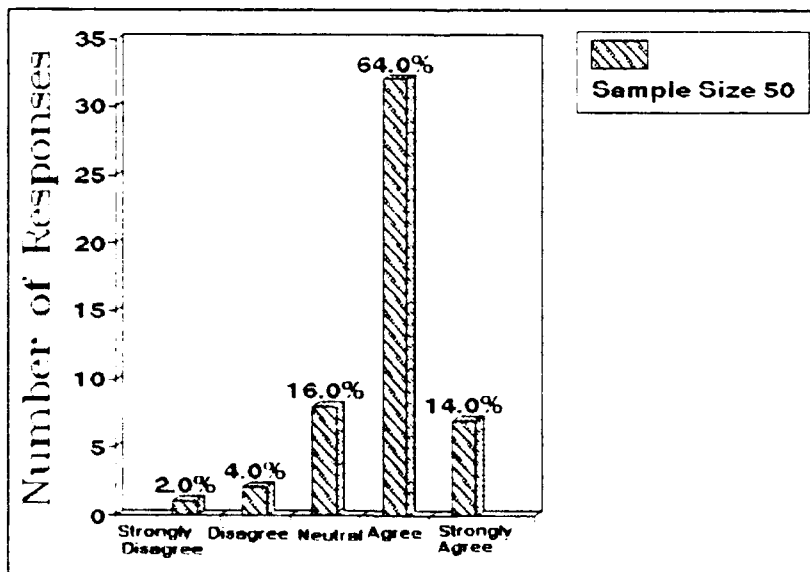


Figure 30. Certification Level I Training Compatible Between LOGPDP and ALPD

A consensus was reached the two models are compatible in training requirements.

Statement Twenty-nine. Certification level II (LOGPDP model) training requirements for logisticians are compatible with the level of requirements for the ALPD model. Seventy-four percent (Figure 31) agreed that the training requirements for a certification level II are compatible between the ALPD and LOGPDP models.

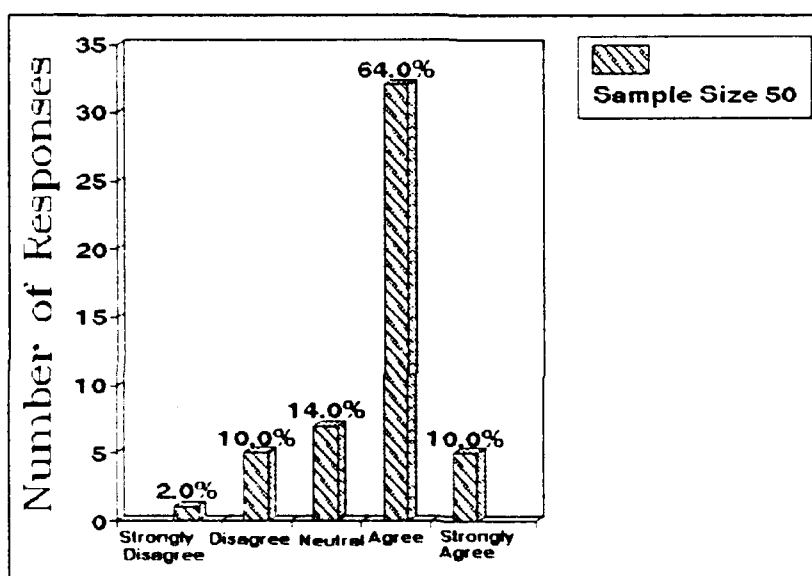
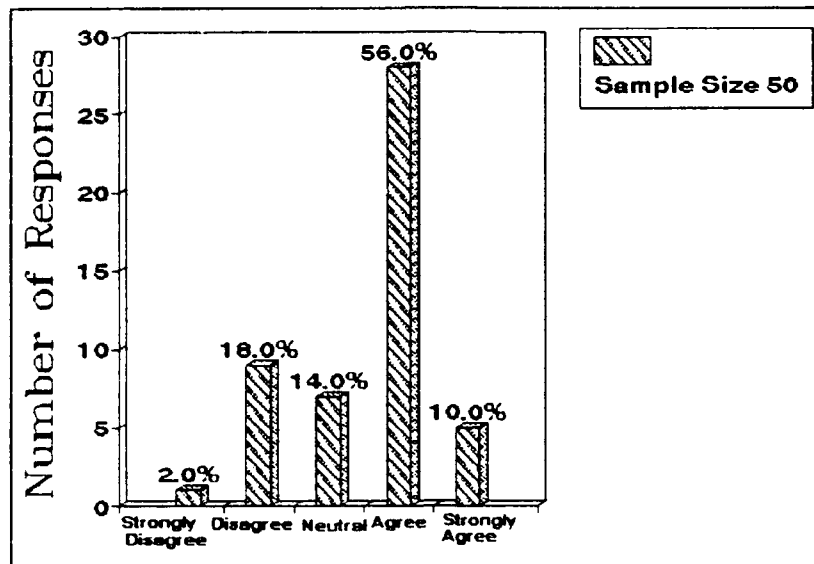


Figure 31. Certification Level II Training Requirements Compatible Between Models

Statement Thirty. Certification level III (LOGPDP) model training requirements for logisticians are compatible with the level of requirements for the ALPDP model. Figure 32 depicts requirements.



**Figure 32. Certification Level III For LOGPDP Is Compatible To ALPDP**

Sixty-six percent agreed that certification level III training requirements for both models are compatible to each other.

#### Response Summary Section IV of the Survey

Sixty-four percent agreed, thirty percent disagreed the educational requirements for level I, II, III are compatible in both the proposed LOGPDP model and ALPD model. Consensus was reached on assignment/experience required for both models at level I, II, III. Sixty-six percent agreed, Certification level III training requirements for both models were compatible. The respondents indicated both programs and models were compatible to each other.

### Final Section of the Survey

The last ten statements of the survey cover a multitude of topics. Unlike the last four sections, these final statement responses will be summarized after each is presented. Following Statement Forty, a final analysis of the data and answers to the investigative questions will be presented.

Statement Thirty-one. There should be a prerequisite of experience for each tier of the four tier Logistic Professional Development Program (LOGPDP). Figure 33 depicts response.

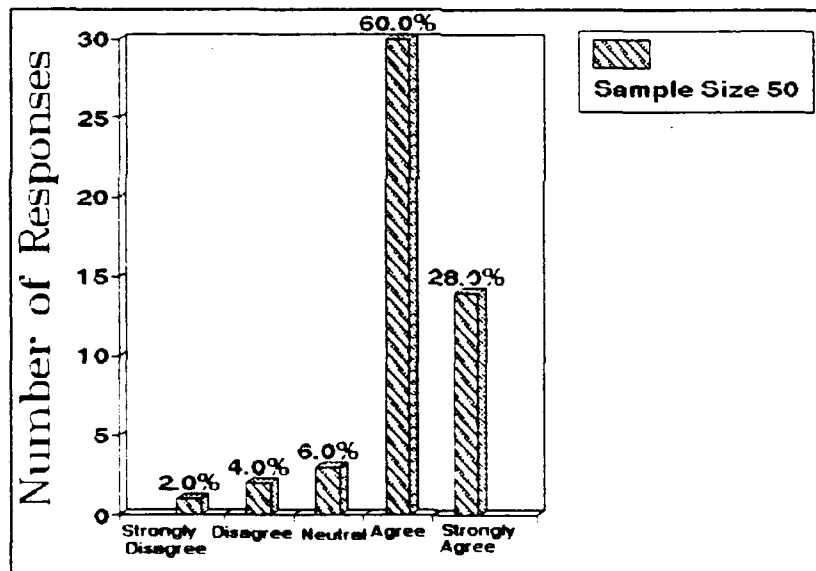


Figure 33. Prerequisite Of Experience For Each Tier Of LOGPDP

Eighty-eight percent agreed a prerequisite of experience is required for each tier of the four-tier LOGPDP program. This response is decisively different from Statements sixteen and Seventeen (See Figures 18 and 19, respectively). The difference might be that statements sixteen and

seventeen address Log 199 which is an introductory course in logistics, and the respondents feel that lacking experience in the field is insignificant when attending an introductory course.

Statement Thirty-two. A more generalized program should be used to educate and broaden logistics personnel.

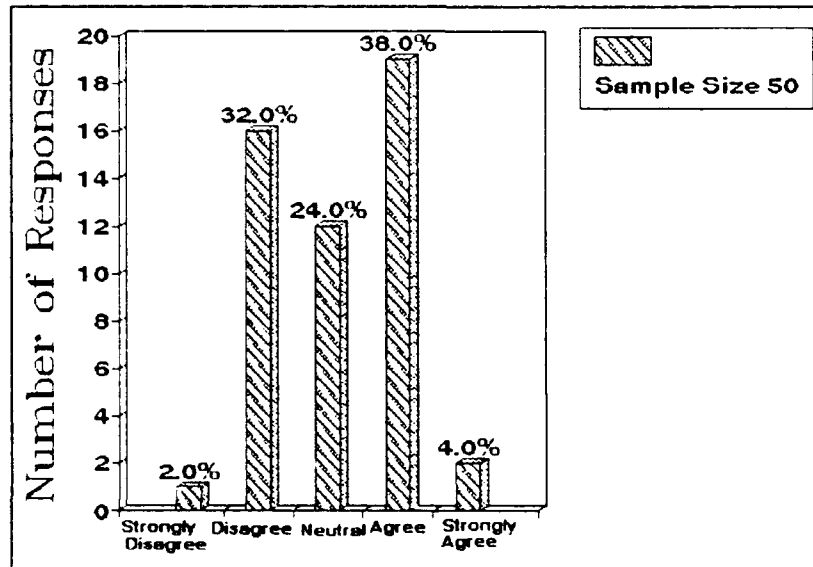


Figure 34. More Generalized Program To Educate and Broaden Logisticians

Thirty-four percent disagreed, twenty-four percent were neutral, and forty-two percent agreed that a more generalized program should be used to educate and broaden logistics personnel. The answers on this statement were almost evenly divided between agree and disagree. One of the reasons for this decision could be since the LOGPDP and APDP programs are fairly new programs, there is not enough experience with either of them to permit the respondents to ascertain a decision.

Statement Thirty-three. The proposed LOGPDP model provides a credible logistics progressional development program. Figure 35 contains the results.

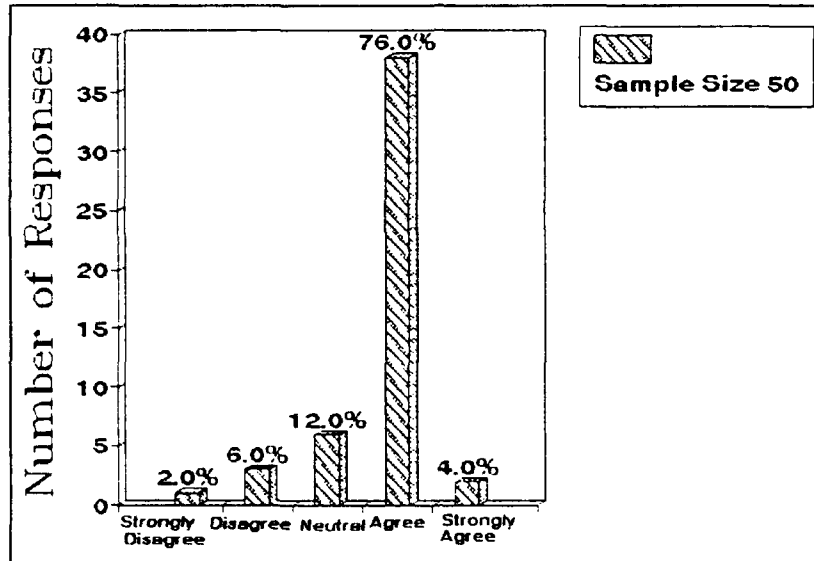
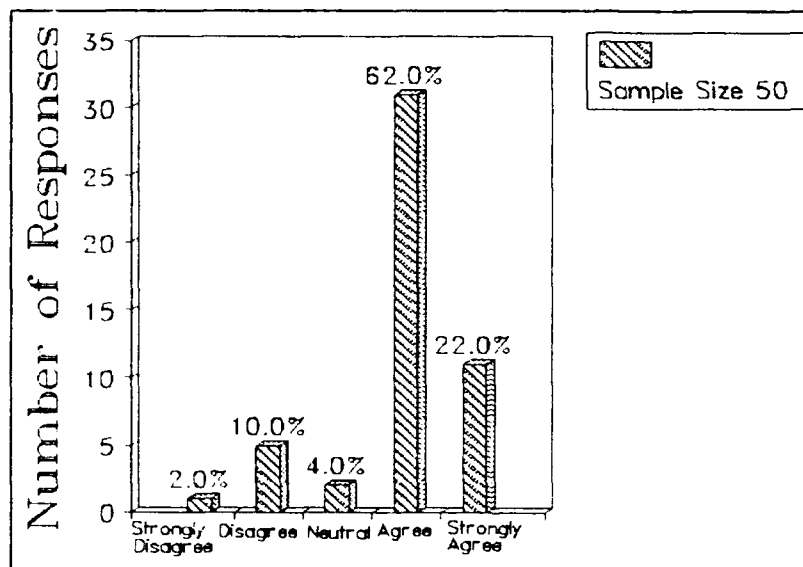


Figure 35. Proposed LOGPDP Model Provides Credible Program

A consensus was reached. The LOGPDP model presented, provides a credible logistics professional development program.

Statement Thirty-four. All logistics AFSCs would benefit from a career progression Program. Eighty-four percent agreed (Figure 36) all logistics AFSCs would benefit from a career progression program. Only twelve percent responded negatively.



**Figure 36. All Logistics AFSCs Benefit From A Career Progression Program**

Statement Thirty-five. The current prerequisite for LOGPDP course attendance is based on rank and should continue as such. Figure 37 contains the results. No consensus was reached for this statement. Fifty-six percent agreed that course attendance should be based on rank. There were no follow-on questions to determine other alternatives to base course attendance on if rank was not chosen.

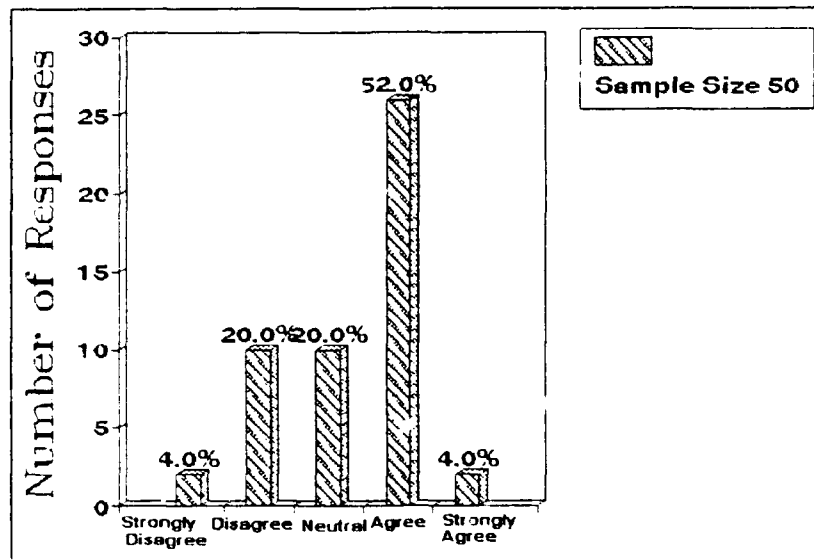
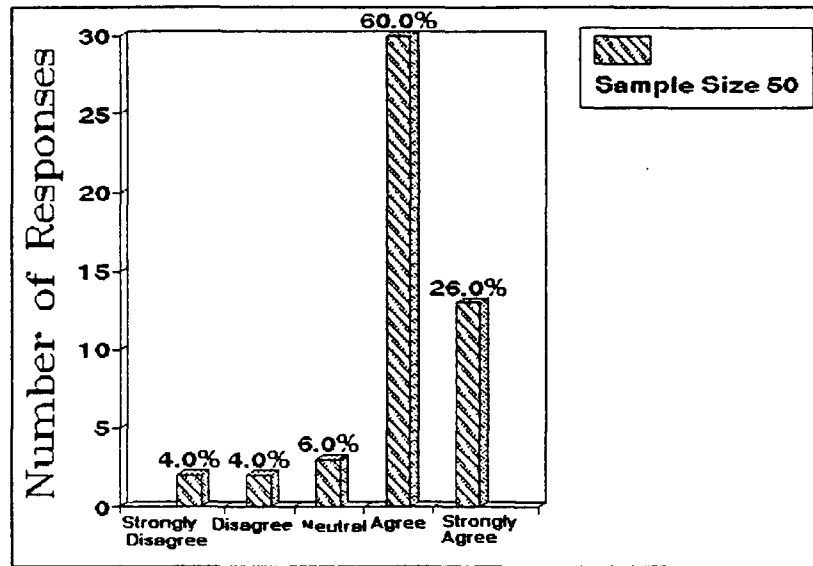


Figure 37. Prerequisite On Rank Should Continue

No consensus was reached for this statement. Fifty-six percent agreed that course attendance should be based on rank, whereas, twenty-four disagreed. A problem with this statement is that there were no follow-on statements to allow alternative selections if rank was not a desired response.

Statement Thirty-six. There is value in providing a career progression program similar to APDP for non-acquisition logisticians.

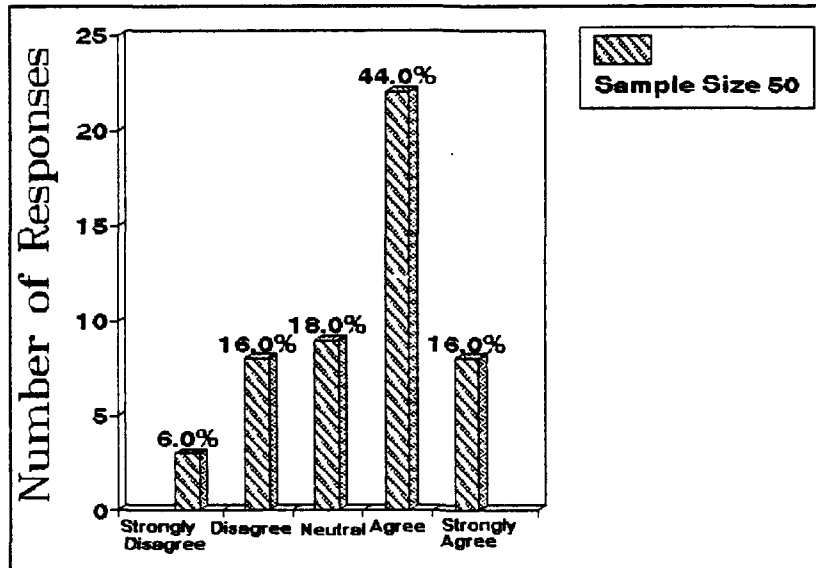




**Figure 38. Value In Career Progression Program Similar To APDP For Non-Acquisition Logisticians**

Eighty-six percent (Figure 38) agree there is value in providing a career progression program similar to APDP to non-acquisition logisticians. A definite consensus. The results of this statement will be addressed in the chapter summary.

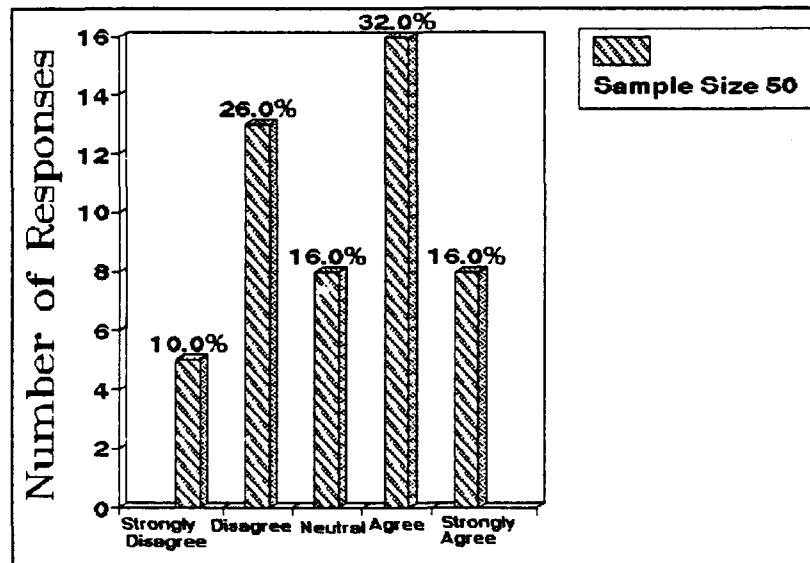
Statement Thirty-seven. The LOGPDP program and model would benefit logisticians if it were integrated into a certification process similar to the process used in the APDP program. Figure 39 contains the result.



**Figure 39. LOGPDP Integrated Into Certification Process Similar To APDP**

Although a consensus was not reached, over half of the respondents (sixty percent) indicated agreement. Only twenty-two percent disagreed.

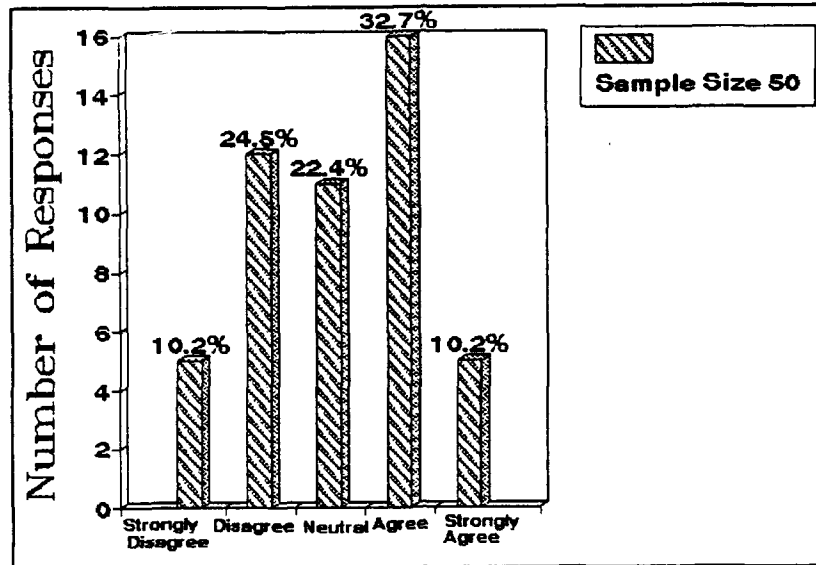
Statement Thirty-eight. I would benefit from the implementation of the LOGPDP model. Figure 40 contains results.



**Figure 40. I Would Benefit From Implementation Of LOGPDP Model**

Thirty-six percent disagreed. What a surprise. Earlier responses indicated that the LOGPDP provided a creditable career enhancement program which would be beneficial to all logisticians yet thirty-six percent of the senior level managers do not believe that they would benefit from implementation of the LOGPDP model. If personnel assigned to them would benefit from implementation of the model, then they too should benefit.

Statement Thirty-nine. There should be a different career path for logisticians working in non-acquisition positions than logisticians working in acquisition positions. Figure 41 contains the response.

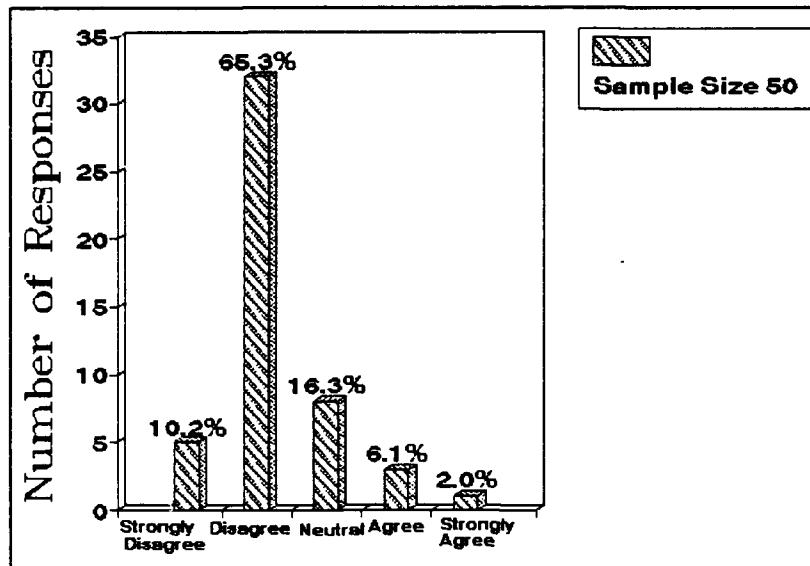


**Figure 41. Different Career Paths For Acquisition Vs Non-Acquisition**

There was no consensus reached on this statement.

Approximately Thirty-five percent disagreed whereas Forty-three percent agreed.

Statement Forty. The proposed AFIT LOGPDP model does not provide for a creditable logistics career enhancement program. Figure 42 contains response.



**Figure 42. Proposed LOGPDP Model Does Not Provide A Creditable Logistics Program**

Approximately seventy-four percent of the respondents selected to disagree with the statement. The conclusion is the proposed LOGPDP model does provide for a creditable logistics career enhancement program.

#### Investigative Questions Answered

Yes, is the answer to the first investigative question of should there be a logistics professional development model? Chapter 1 presents the background information on the establishment of the requirements to develop a LOGPDP - program. Members of a colloquium from Air Staff, Air University, and AFIT, agreed that recurring education in logistics fields outside of the speciality boundries is required for the enhancement of civilian and government logisticians.

three, thirty-four and thirty-six which were designed to help determine the answer to the first investigative question. Statement thirty-three (Figure 35) reveals eighty percent of the survey respondents agreed the proposed LOGPDP model provides a credible logistics professional development program. Eighty-four percent (Figure 36) were in agreement that all logistics AFSCs would benefit from a career progression program (only twelve percent disagreed) and over eighty-six percent (Figure 38) agreed there was value in providing a career progression program similar to the APDP program to logisticians assigned to non-acquisition positions.

Investigative Question Two. Can the Acquisition Professional Development (APDP) program, using the time phases for education, training and experience in the Acquisition Logistics Professional Development (ALPD) model, be applied to the development of an Air Force logistics career development model? If so, how? A LOGPDP model was derived by the researcher using the ALPD model as a baseline and then integrating the LOGPDP program into the new baseline. The integration process was simple. In the Assignment/Experience and Training areas (See Appendix A, Pg 7, Figures 1 & 2) wherever an acquisition PCE course or acquisition experience was a requirement within the ALPD model, it was replaced by a logistic PCE course or logistic assignment experience in the LOGPDP model. Education requirements remained the same between the two models. The

newly derived model was presented to the respondents as the LOGPDP model and respondents were asked to compare the two when replying to the statements. A consensus of agreement was reached on the compatibility between the LOGPDP and ALPD models in the area of experience requirements. Training requirements for levels I and II also met a consensus. Statements; fourteen, fifteen, eighteen, and twenty all met consensus and were the statements responsible for the comparisons. Sixty-four percent agreed that the educational requirements should be the same for the ALPD and LOGPDP models. Overall, the two models were voted compatible. This was just one example of how the ALPD model can be applied with approval from the experts, to produce a logistics career development model.

Investigative Question Three. The third and final investigative question to be answered was "Should the Logistics Professional Development Program and proposed model be integrated into a certification process/program similar to the APDP program". Statements; 32, 33, 34, 36, 37, and 39 comprise the experts opinion on this investigative question. Statement thirty-two was almost an even split between agreement and disagreement as to whether a more generalized program should be used to train and broaden logistics personnel. Over twenty-four percent were undecided. One of the reasons for the indecision may be that the APDP and LOGPDP are relatively new start programs with limited attendance. The logistics community has not

had the time to gage the effects these programs have had on their personnel who have attended. The experts have agreed (eighty percent or higher) to these statements; the proposed LOGPDP model provides a credible career progression program, all logistics AFSCs would benefit from a career progression program, and there is value in a career progression programs similar to the APDP program for non-acquisition logisticians. The highest negative response was twelve percent who disagreed to the statement of all logistics AFSCs would benefit from a career progression program.

#### Chapter Summary

This chapter begin by presenting the 5 sections of the survey responses and analysis. The first section presented the demographics of the respondents which either qualified or disqualified them according to the criteria established in chapter three. The second section analyzed the respondents familiarity with the APDP and LOGPDP programs. The following section provided information on the LOGPDP program and analyzed data received from the respondents . Section four presented the ALPD and proposed LOGPDP models for comparisons and then analyzed the responses. The last and final section of the survey was derived to be a catch all section and each statement response was analyzed before continuing to the next. Chapter 5 will contain the findings to the investigative questions, and conclusions, inconsistencies, and recommendations for future study.



## V. Conclusions and Recommendations

### Conclusions

The first four chapters of this thesis has presented research designed to determine if the logistics community is ensuring that all logisticians are being kept abreast of the latest developments within their field by providing career enhancement/development programs to all logistic AFSCs.

Three investigative questions guided this research:

1. Should there be a logistics professional development model?

2. Can the Acquisition Professional Development Program using the time phases for education, training and experience in the Acquisition Logistics Professional Development (ALPD) model, be applied to the development of an Air Force logistics career development model? If so, how?

3. Should the Logistics Professional development Program and proposed model be integrated into a certification process/program similar to the APDP program? An opinion survey of senior level managers employed within the logistics community was conducted to help determine the answers to these questions.

Investigative Question Number One Answered. Because of today's expanding technological environment, the field of logistics has become much broader than initially defined. In chapter 2, insight into what logistics is along with the

definition of a logistician was provided. Some of the many individual functional specialties within logistics were mentioned along with the desire of personnel to concentrate on gaining knowledge and experience within their own specialty. This pursuit of their specialty produces personnel with plenty of experience and training in one functional area but they lack the depth and breath of knowledge required of a logistician. Retired Lt. General Marquez labeled this as "stovepiping" (14:2). A survey completed in 1985 by Dawn L. Wilson confirmed that a large number of senior government logistics managers were specialists.

Dr. Edward Deming (21:84), and Chase and Aquilano (3:472) emphasized the need for continued education and training programs within the field of logistics. The merits, needs, and benefits supplied by professional continuing educational courses were expressed by Mc Dade (15:69) and Griffith (11:102) in chapter 2. DOD manual 5000.52M established guidelines for career broadening and initiated the DOD Career Development Program for Acquisition Personnel and re-emphasized the need for education and training within the field of logistics.

The Air Staff provided justification for establishment of the Logistics Professional Development Program and its series of four professional continuing educational courses (17:2). Captain Grabowski, used expert senior Air Force logisticians to externally validate the appropriateness of

the subject matter taught in the four tiers of the LOGPDP program (10:vii).

The two new programs, APDP and LOGPDP, are intended to educate and broaden the knowledge base of government logisticians. The APDP program is the only program that provides a phased career progression/certification program for personnel assigned to acquisition. The LOGPDP program does not use a certification process. With the needs, benefits, and requirements of the logistics community recognized, and combined with the results of the opinion survey, the answer to investigative question one is yes, there should be a Logistics Professional Development Model.

Investigative Question Number Two Answered.

Investigative question number two was answered by using the existing ALPD model as a baseline and integrating the LOGPDP program (PCE courses) into it. Wherever the word acquisition appeared in the baseline model, logistics replaced it to become the LOGPDP model. Instead of Professional Continuing Education Courses (PCE) System 100 and Systems 200, PCE courses Log 199 and Log 299 took their place. Unlike the PCE courses in the APDP program, the log courses do not have to be completed in sequence therefore slight variations in requirements for level II became necessary. For example, to compete for level II certification, both Log 299 and 399 must be completed but they do not have to be completed in sequence like Systems 200 and Systems 400 in the ALPD model. Statements comparing

the two models at each level in education, assignment/experience and training were solicited from the respondents. The majority of the respondents indicated that the ALPD and LOGPDP models were compatible with each other which signifies an answer of yes to the second investigative question.

The how portion of the investigative question number 2 was not answered by providing the LOGPDP model to the respondents for comparison. Basically, the replies received answered the unasked question, what should the LOGPDP model look like? The "how" portion of the investigative question was not properly solicited. Statements like; The senior level managers should identify the various certification level requirements for each position under their authority or all assigned positions, acquisition and non-acquisition should have some level of certification requirement identified, these type of statements would ensure investigative question number two's "how", to be answered.

#### Investigative Question Number Three Answered.

Investigative question number three: Should the LOGPDP program and model be integrated into a certification process similar to the APDP program? The answer to this question is yes, it should be integrated into the APDP program based on the following analysis. The largest negative responses received from the experts were to the statements thirty-two and thirty-nine. Statement thirty-two suggested a more generalized program should be used to

educate and broaden logistic personnel but respondents could not decide if broadening the program would help.

Respondents to question thirty-nine had problems deciding if there should be different career paths for personnel working in non-acquisition positions than those that were. Several unsolicited responses to the survey mentioned the "cradle to grave" aspect of logistics and that personnel within logistics should have the same "cradle to grave" knowledge of logistics.

Chapter 1 of this thesis points out that until recently, there was a lack of a clear plan for logisticians working in non-acquisition positions to enhance and broaden their knowledge base of logistics. Each specialty field within logistics provided fragmented information to its personnel without defining a career education plan or certification process to manage their careers. The newly revised regulations applying to career enhancement programs do not address logistic personnel assigned to non-acquisition positions. Two new programs, the Acquisition Professional Development Program (APDP) and the Logistics Professional Development Program (LOGPDP) were established to help enhance the careers of all logisticians. Of the two new programs, the APDP program applies to a very small portion of the logistics community, whereas the LOGPDP program applies to all personnel assigned to logistics. The APDP program has received the most notoriety of the two programs because it is mandated by public law, and has

congressional interest and support. Although the LOGPDP program applies to the majority of personnel assigned to logistics, it has not received the attention, support or funding that the APDP program has.

The APDP program emphasis is on the management and processes used in the procurement of systems and the initial planning of the life-cycle process. The certification process used to implement this program ensures personnel assigned within the field of logistics have a clear and well defined career path.

The LOGPDP program emphasis is in the Operation and Support area of logistics. The procurement process is presented but only as a small portion of the overall life-cycle process. Emphasis is on supply, support, distribution, and transportation. LOGPDP looks at a much larger portion of the system life-cycle process than the APDP program. The LOGPDP program does not use a certification process, it is not mandated by public law, does not have the support or interest of congress nor is it adequately funded to allow a significant number of logistic personnel to attend. Because of limited attendance, and lack of proper support and funding, this program will surely die.

A quote from an electronic mail message dated February 6, 1992 from the commanders of both the Air Force Systems Command (General Yates) and Air Force Logistics Command (General McDonald) stated:

Air Force Material Command will be integrated weapon system management. The "cradle-to-grave" management of all Air Force Systems. This approach provides a single focal point for our customers. That single focal point will be the system program director, who will have responsibility for all aspects of a system or commodity throughout its life. It increases the system program directors authority and flexibility, integrates all critical processes and eliminates the "seams" that currently exists between development and support.

Using this new philosophy of integrating all critical processes and eliminating the "seams" that exists between development and support, it becomes obvious the APDP program must be integrated with the LOGPDP program to provide the "cradle-to-grave" support perspective.

#### Recommendations

I recommend that the "cradle-to-grave" concept of weapon system management be applied to the education/training and experience of those personnel that are charged with making weapon system management happen. Air Force Material Command should certify all logistic positions Air Force wide. Integration of the LOGPDP and APDP programs should occur immediately. The combined program should preserve the certification process. The certification program/process should be expanded to include some type of re-certification process for all logistics personnel. As Dr. Deming stated;

It is not enough to have good people in your organization. They must be continually acquiring the new knowledge and the new skills that are required to deal with new materials and methods of production. Education and retraining-- an

investment in people--are required for long-term planning. (21:84)

By taking the initiative and implementing the "cradle-to-grave" philosophy across the whole spectrum of systems acquisition and support, the Air Force can maintain and sustain its Global Power and Global Reach.

### Inconsistencies

In the process of researching data for this thesis, some inconsistencies in the APDP program were noted and are presented.

#### Overall APDP Inconsistencies.

1. The training alternatives for one model should be approved, and equivalent for all models within the APDP program. For example; Under training alternatives listed in the Acquisition Logistics Professional Development (ALPD) model:

(a) Completion of the masters degree in Logistics fulfills all specialty course training requirements. (7:5-3(a))

Completion of a Masters degree in Acquisition Logistics is not mentioned until the Comptroller Acquisition Professional Development (CAPD) model:

An AFIT Masters Degree in Acquisition Systems Management is an equivalent for courses WSYS-100, WSYS-200 and WSYS-400. (7:Table 7-1 (d))

2. Course equivalencies should be the same for all models and be listed in a central location.



3. AFIT Graduate courses such as SMGT 643 Acquisition Systems Management should have their equivalencies listed within the regulation and centralized.

4. Since by-pass testing is now allowed for Systems 100 and 200, the AFIT time lapse requirements between SYS 100 and 200 should be dropped.

5. Currently AFIT course directors will not provide course material to personnel not currently enrolled in the course. AFIT should ensure that course material is available to personnel who wish to take the by-pass test.

Contracting Professional Development Model. In the Contracting Professional Development (CPD) model (one of the nine models in the APDP program) there is no requirement to attend any of the acquisition PCE courses; Attendance at Systems 100, 200 or 400 are desired but not required by contracting personnel. Contracting Officers provide the warrant and are the negotiators for most procurement actions and should have current basic and common knowledge of the acquisition process. I believe that the Procurement, Adminstrating and Terminating Contracting Officers should attend all of the acquisition PCE courses.

Comptroller Professional Development Planning Model. In the Comptroller Acquisition Professional Development (CAPD) model, Level I requirement in training starts with System 200. An AFIT prerequisite for System 200 is System 100, therefore level I training should reflect both System 100 and 200 as Level I requirements.

These were just a few of the inconsistencies noted in the APDP program. Overall the program will be very beneficial to personnel assigned in acquisition.

Appendix A: Survey Cover Letter

SUBJECT: Acquisition and Logistics Professional Development  
Program Survey Package

TO:

1. Please take the time to complete the attached questionnaire and return it in the enclosed envelope by 10 January 1991.

2. This survey examines two educational processes/programs that are used to educate and train government logisticians. The data we gather will become part of an AFIT research project and may influence the way the Air Force elects to educate and train government logisticians in the future. Your individual responses will be combined with others and will not be attributed to you personally.

3. Your participation is completely voluntary, but we would certainly appreciate a few minutes of your valuable time. Should you have any questions about this survey, feel free to contact a Mr. Richard Andrews at DSN: 785-4845.

Signature Block for Department Head

2 Atch

1. Questionnaire

2. Return Envelope

Appendix B: Survey of the Logistics  
Professional Development Program

AFIT/GLM/LSM/91S-25

Survey Background

The personnel population in the field of logistics has two major divisions. The first, and largest in number of personnel assigned, is to organizations providing normal logistic operation and support for the Air Force mission and is the Operations and Maintenance area. The second area recently broken out for specialized management is Acquisition, which supports the Air Force mission to develop and acquire new weapon systems.

There are several programs and courses intended to enhance and broaden the knowledge base of the logisticians assigned in these two major divisions, but until recently, there was no clear plan for logisticians to enhance their educational development. Each career field within logistics provided fragmented information to its personnel without defining a career education plan or certification process to manage their careers. Two new programs, the Acquisition Professional Development Program (APDP), and the Logistics Professional Development Program were individually developed to provide the logistics field with education/training enhancement programs. The APDP program is a career progression/certification process for personnel assigned specifically to acquisition, and the Logistics Professional Development Program (LOGPDP) is for all logisticians supporting Operations/Maintenance and Acquisition.

APDP

The APDP is mandated by law. It applies to all Air Force Specialty Codes (AFSCs) categorized as acquisition career fields but limits the certification to logisticians working in acquisition positions only. An advantage of the APDP program is that it sets a definitive and practical professional development management plan that establishes minimum education, training, and experience requirements. These requirements are monitored using a three-level certification process. No other logistics career enhancement program uses a certification process.

LOGPDP

The LOGPDP program, sponsored by the Air Staff, is a series of phased career Professional Continuing Education (PCE) courses developed to educate, broaden and enhance all logisticians.

Although PCE courses are employed in both programs, the approaches used are very different. The APDP program utilizes PCE courses structured toward specific job related tasks and processes, and labels those courses as training. The LOGPDP

program uses PCE courses by focusing on new concepts and theories within logistics and emphasizes the educational aspect of PCE.

#### SURVEY QUESTIONS

-----  
1. Personal Information. This part of the survey is designed to collect general information on the assignment and experience level of the survey respondents. Circle or fill in all that apply.  
-----

1. Indicate the functional area to which you are currently assigned.

- |        |        |        |               |
|--------|--------|--------|---------------|
| A. LG  | C. RM  | E. LGS | G. LGT        |
| B. DCM | D. LGM | F. LGX | H. Other_____ |

2. What is your pay grade?

- |       |               |          |               |
|-------|---------------|----------|---------------|
| A. 05 | C. 07 & above | E. GM-15 | G. Other_____ |
| B. 06 | D. GM-14      | F. SES   |               |

3. To which command are you currently assigned?

- |        |          |         |               |
|--------|----------|---------|---------------|
| A. SAC | C. TAF   | E. AFLC | G. USAFE      |
| B. MAC | D. PACAF | F. AFSC | H. Other_____ |

4. How long have you held your current position?

- |                       |                 |
|-----------------------|-----------------|
| A. Less than one year | C. 3 - 4 years  |
| B. 1 - 2 years        | D. over 4 years |

5. How many total years of experience in logistics do you have?

- |                       |                 |              |
|-----------------------|-----------------|--------------|
| A. Less than one year | C. 5 - 8 years  | E. More than |
| B. 1 - 4 years        | D. 9 - 12 years | 12 years     |

6. Which Military AFSCs do you supervise?

- |         |         |         |
|---------|---------|---------|
| A. 0046 | C. 40XX | E. 64XX |
| B. 31XX | D. 60XX | F. 66XX |

7. Which civilian job series do you supervise?

G. 0346	M. 2030	S. 2131	Y. *0345
H. 1152	N. 2032	T. 2135	Z. *1101
I. 1670	O. 2050	U. 2144	AA. *1601
J. 2001	P. 2101	V. 2150	BB. *1910
K. 2003	Q. 2102	W. *0301	CC. *0800
L. 2010	R. 2130	X. *0343	DD. *1515

\* Positions which perform logistics duties 50 percent or more of the time.

8. How many of the personnel under your supervision are assigned to acquisition positions?

A. 1-3	C. 7-10
B. 4-6	D. more than 10

-----  
II. Background Knowledge Of Logistics Programs. This part of the survey is designed to collect general information on the respondent's familiarity with the Acquisition Professional Development Program (APDP) and the Logistics Professional Development Program (LOGPDP) program. Please read each question carefully and circle your response.  
-----

9. I am familiar with the Acquisition Logistics Professional Development (ALPD) model.  
-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

10. I am unfamiliar with the LOGPDP program but after reviewing the course curriculum at attach 1, I believe the program would benefit all logisticians.  
-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

11. I am familiar with the Logistics Professional Development Program (LOGPDP).

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

12. I am unfamiliar with the LOGPDP program but after reviewing the course curriculum at attach 1, I believe the knowledge gained from attending this program would not benefit logisticians assigned to acquisition.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

13. I am aware that the APDP program is only applicable to personnel assigned to Acquisition positions.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

III. LOGPDP. The purpose of this section is to collect data on the LOGPDP Program. The course curriculums for all four PCE courses are provided as Attachment 1 to this survey.

-----

The program is a four tiered professional continuing educational program paralleling the major phases of a logistician's career progression. The courses begin with an introduction to logistics (Log 199) and culminate with a senior executive logistics course (Log 499). Each course is intended to build on the knowledge acquired in the preceding course. Prerequisites for the courses are based on rank structure.

Log 199 Introduction to Logistics (the first of a four tier logistics educational program) provides a broad based introduction to logistics including its roles, meaning, environment, principles, processes, and functions. Attendees are officers in the grades of 2nd Lieutenant through Major, civilians grade GS-5 through GS-12, and enlisted E-6 through E-9. See Attachment 1 for course curriculum.

-----

14. All newly assigned logistic personnel (except those assigned to acquisition) should attend Log 199.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

15. All Acquisition logistics personnel should be required to complete Log 199.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

16. Logistic Personnel should attend Log 199 after award of primary AFSC but not before.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

17. There should be a prerequisite of experience before attending Log 199.

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

Log 299 Combat Logistics (the second of a four tier PCE course) primary objectives are to provide a structured orientation in the wartime roles and responsibilities of logisticians. It presents an overview of combat logistics plans, strategies, and procedures that will likely be implemented in a wartime scenario. Eligibility criteria for this course are officers in the rank of Captain and above, civilians GS-9 through GS-12, and enlisted E-7 through E-9. See Attachment 1 for course curriculum.

-----

18. All Non-acquisition logisticians should be required to attend Log 299 (Combat Logistics).

-----

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

19. Acquisition logisticians should attend Log 299.



---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Log 399 Strategic Logistics Management purpose is to enhance understanding of logistics doctrine, policies, processes programs, planning, functions, and current initiatives. It emphasizes relationships of acquisition, wholesale support, operational support, inter-service and allied logistics. The course is offered to officers in the rank of Captain, and above, civilians grades GS-9 through GS-12, and enlisted E-7 through E-9. See Attachment 1 for course curriculum.

20. All Non-acquisition logisticians should be required to attend Log 399.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

21. Acquisition logisticians should attend Log 399.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

Log 499 Senior Logistics Officer Development was designed to provide senior logisticians the opportunity to examine management systems and values affecting Air Force programs. Policies, organizations, and issues currently affecting logistics are discussed in order to offer the most effective ways of assessing and influencing organizational and interpersonal behavior. Eligibility criteria for the course are officers with a rank of Lt Colonel, and above, civilian grades GM-14 and above. See Attachment 1 for course curriculum.

22. All Non-acquisition logisticians should be required to attend Log 499 (Senior Logistics Officer Development).

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

23. All logisticians should attend Log 499.

Strongly  
Disagree

A

Disagree

B

Neutral

C

Agree

D

Strongly  
Agree

E

ACQUISITION LOGISTICS PROFESSIONAL DEVELOPMENT MODEL

TRACK LEVEL	I	II	III
EDUCATION	BACHELOR DEGREE	BACHELOR DEGREE	MASTERS DEGREE
ASSIGNMENT & EXPERIENCE	1 YEAR ACQ LOG;	5 YRS MIN 2 YRS ACQ 2 YRS, SUPPORT, MAINT, OPS ACQ SYS	7 YRS MIN 3 YRS ACQ 1 YR PO 2 YRS SUP, MAINT
TRAINING	FUND OF ACQ (ATC) OR SYS 100; SYS 200; 1 SPECIALTY CRS	DPML CRS SYS 225; SYS 400; LOG ORIENT CRS; 3 SPECIALTY CRS	DSMC-PMC DESIRED

FIGURE 1

PROPOSED  
LOGISTICS PROFESSIONAL DEVELOPMENT MODEL

I	II	III
BACHELOR DEGREE	BACHELOR DEGREE	MASTERS DEGREE
1 YR LOG	5 YRS MIN LOG EXPER; IN ONE OR MORE LOG AFSCs	7 YRS LOG; 3 YRS MIN EXPER IN ONE OR MORE LOG AFSCs
INTRO TO LOGISTICS LOG 199; COMBAT LOGISTICS LOG 299; 1 SPEC CRS	COMBAT LOGISTICS LOG 299; STRATEGIC LOGISTIC MGT LOG 399 3 SPEC CRS	SENIOR LOG OFFICER DEV LOG 499  DSMC

FIGURE 2

Refer to Figure 1 and 2 for questions 24 through 30.

IV. Comparisons. The following series of questions is based on the ALPD model (Fig 1) and the proposed LOGPDP model (Fig 2). The LOGPDP model (derived from the LOGPDP program) is structured similar to the ALPD model to aid in understanding their requirements. Certification level I (Fig 1) requires 1 year assignment/experience in acquisition.

24. Educational requirements for certification at levels I, II, and III should be the same for both the ALPD model (Fig 1) and the LOGPDP model (Fig 2).

Strongly  
Dissagree

A

Disagree

B

Neutral

C

Agree

D

Strongly  
Agree

E

25. It is appropriate for certification level I (Fig 2) to require 1 year assignment/experience in logistics.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Certification level II (Fig 1) requires 5 years minimum assignment/experience in logistics, 2 year minimum in acquisition.

26. Appropriate assignments/experience in logistics for level II certification (Fig 2) should be 5 years minimum in one or more logistic AFSCs.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Level III certification (Fig 1) requires 7 years experience /training; 3 years minimum acquisition. 2 years other.

---

27. An appropriate assignment/training for (Fig 2) is 7 years logistics, 3 years minimum experience in one or more Logistic AFSCs.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Certification level I training (Fig 1) requires Sys 100 (Introduction to Acquisition), Sys 200 (Acquisition Planning and Analysis) and 1 specialty course. Fig 2 requires Log 199 (Introduction to Logistics), Log 299 (Combat Logistics), and 1 specialty course. Both programs are targeted for the entry and journeyman level.

---

28. Certification level I (Fig 2) training requirements for logisticians are compatible with the level of requirements for Fig 1 (acquisition).

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Level II certification for training (Fig 1) requires Sys 400 (Advanced Program Management), and 3 specialty courses. Level II certification for training (Fig 2) requires Log 299 (Combat Logistics), Log 399 (Strategic Logistic Management), and three specialty courses. All these courses target middle managers.

29. Certification level II (Fig 2) training requirements for logisticians are compatible with the level of requirements for Fig 1 (acquisition).

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

Level III certification requirements in training (Fig 1) specify Defense Systems Management College (DSMC) Program Management course is desired. Figure 2 requires completion of Log 499 (Senior Logistics Officer Development). Both programs are targeted for executive level managers.

30. Certification level III (Fig 2) training requirements for logisticians are compatible with the level of requirements for Fig 1 (acquisition).

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

31. There should be a prerequisite of experience for each tier of the four tier Logistic Professional Development Program (LOGPDP).

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

32. A more generalized program should be used to educate and broaden logistics personnel.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

---

33. The proposed AFIT LOGPDP model provides a credible logistics professional development program.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	EE

34. All logistics AFSCs would benefit from a career progression program.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

35. The current prerequisite for LOGPDP course attendance is based on rank and should continue as such.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

36. There is value in providing a career progression program similar to APDP to non-acquisition logisticians.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

37. The LOGPDP program and model would benefit logisticians if it were integrated into a certification process similar to the process used in the APDP program.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

38. I would benefit from the implementation of the LOGPDP model.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

39. There should be a different career path for  
logisticians working in non-acquisition positions than  
logisticians working in acquisition positions.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

40. The proposed AFIT LOGPDP model does not provide for a  
creditable logistics career enhancement program.

---

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A	B	C	D	E

2 Atch  
1. Course Curriculum  
2. Response Sheet

Appendix C: Logistic Professional Development  
Program Course Curriculum

Log 199 Introduction to Logistic contains;

Overview of Logistics  
Organizations Involved in the Air Force  
Logistics Environment  
Logistics Planning  
Federal Financial Management  
Major systems Acquisition  
Quality, and Reliability and Maintenance  
Integrated Logistics Support  
Provisioning  
Forecasting Techniques  
Requirements Determination  
Contracting Management  
Supply Management  
War Reserve Material (WRM)  
Equipment Management  
Transportation Management  
Equipment Maintenance  
Logistics Information systems  
Overview of International Logistics  
Log-Plan-X Exercise Play  
Reutilization and Marketing  
Future Logistics Issues

Log 299 Combat Logistics

Nature of Logistics  
Logistics in Three 3 Wars  
Post Vietnam Conflicts  
Mobilization  
Total Force  
Combat Environment  
Air Base Operability  
Supply Procedures  
Prepositions  
Transportation  
Logistics C2  
Aircraft Maintenance  
National Warplanning  
USAF Warplanning  
The Deliberate Planning Process  
Crisis Action Planning  
Joint Planning Exercise  
Mobility

Log 399 Strategic Logistics Management

Attachment 1

Historical Logistics Perspective  
Senior Logistics Perspective  
The Environment of Logistics  
Command, Control and Logistics  
Joint Logistics Planning  
National Planning Systems  
Global Reach - Global Power  
The USAF Logistics Strategic Plan  
Sister Service Strategic Logistics Issues  
Federal Financial Management  
Implications of the Defense Management Review  
Alliance Logistics  
Quality Roundable  
Weapon System Supportability  
Student Presentations  
Strategic Mobility  
National Mobilization  
Contingency Operation Logistics  
Strategic Logistics Management Roadmap  
Current and Future Issues

Log 499 Executive Senior Logistics Officer Development

Logistics Environment  
Global Logistics  
Fiscal Environment  
Views from Previous Leaders  
Student Issues



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### Vita

David E. Gressman is a native Californian. He enlisted in the Air Force in 1965 where he served honorably for 13 years. In 1979 he departed the Air Force to work as an engineer for American Airlines on their flight simulators. After a short stint with American Airlines, Mr. Gressman joined civil service as a flight simulator technician. In 1983 he became an Air Force Engineering and Technical Service representative for the C-5 and C-141 Flight Simulators and Cockpit Procedure Trainers at Travis AFB California. In 1986 he was reassigned to Wright-Patterson AFB OH as a logistician working on special projects in the Bomber and Tanker System Program Office. Mr. Gressman has an Associate Degree in Applied Sciences in Computer Technology, a Bachelor Degree in Psychology and another in Management Logistics. Mr. Gressman became a graduate student in Logistics Management at AFIT in May of 1990.

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# REPORT DOCUMENTATION PAGE

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13. ABSTRACT (Maximum 200 words)

The personnel population in the field of logistics has two major divisions. The first is to organizations providing logistic support for the Air Force mission and is the Operations and Maintenance area. The second area is Acquisition, which supports the Air Force mission to acquire new weapon systems. Until recently, there was no clear plan for logisticians assigned in these two major divisions to enhance their educational development. This research project reviewed several logistic career enhancement programs focusing on two new programs, the Acquisition Professional Development Program (APDP) and the Logistics Professional Development Program (LOGPDP). The APDP program has received the most notoriety of the two because it is mandated by public law, has Congressional interest and uses a certification process to ensure personnel assigned to acquisition have a clear and well-defined career path. LOGPDP, the second program, applies to the majority of personnel assigned to logistics; it does not have the support, funding or use a certification process like the APDP program. In response to a survey, expert senior-level logistics managers from the two major divisions concluded that all logisticians would benefit if there was only one career track, the two programs were integrated into one, and the certification process preserved.

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4. Often it is not possible to attach equivalent dollar values to research, although the results of the research may, in fact, be important. Whether or not you were able to establish an equivalent value for this research (3 above), what is your estimate of its significance?

- a. Highly                      b. Significant                      c. Slightly                      d. Of No  
Significant                      Significant                      Significance

5. Comments

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